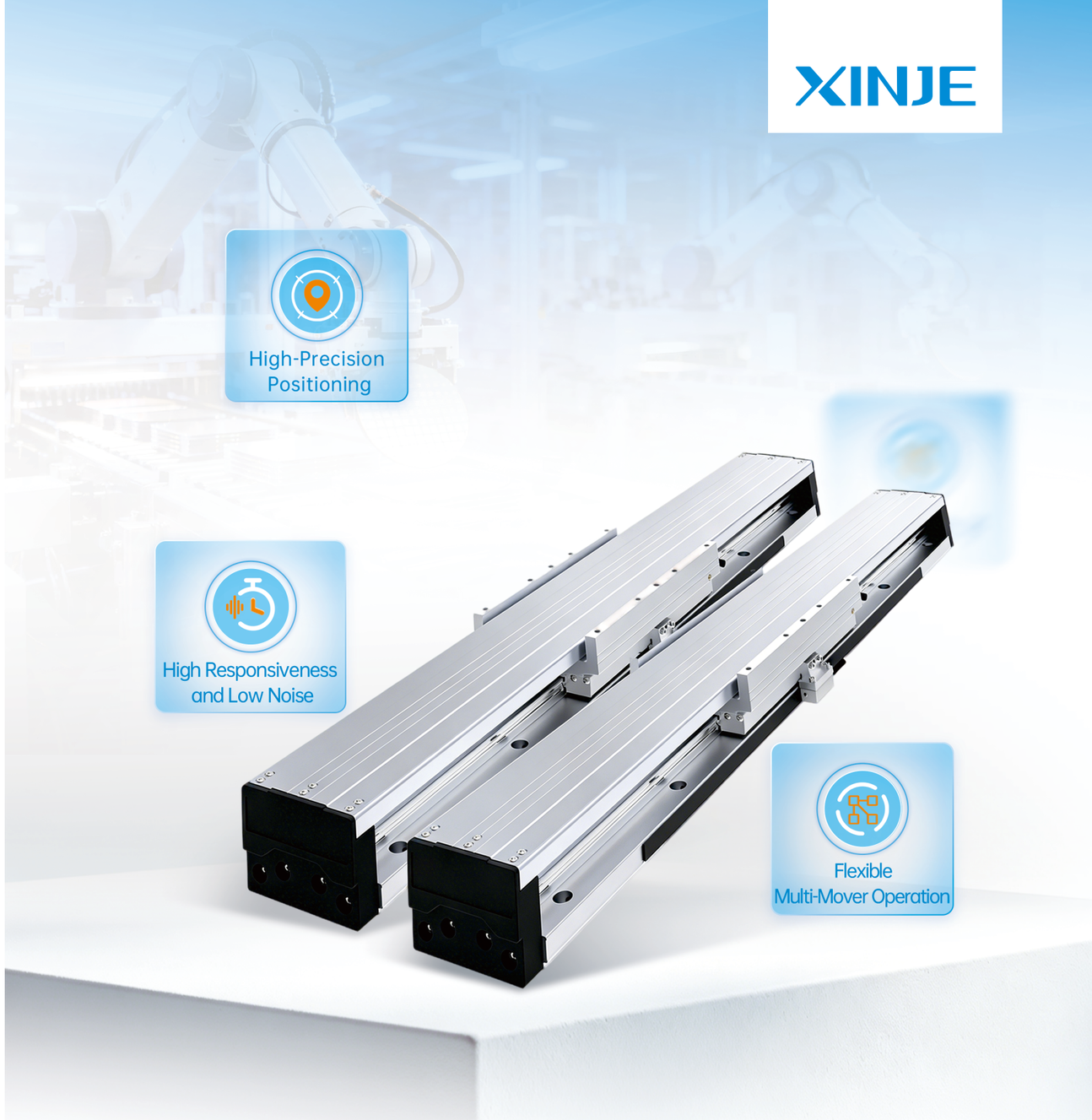



# XPLS Series Product Manual

Fully Standardized Linear Motors

To be the Most Trusted Partner in Automation

XINJE Wechat

XINJE

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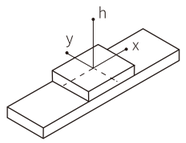
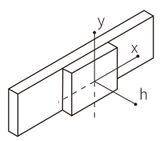
XPLS188 Series Linear Motor 98-99

# Selection Method Example

Step by step, confirm the application conditions, module series, stroke, and other parameters based on the selection steps, and finally generate the module model.

| | | |
|---|---|---|
| STEP1 | Confirm Application Conditions | Confirm the application conditions such as load weight, center of gravity offset, installation method, and speed. |
| STEP2 | Select Module Series | Select the module series based on the application conditions. |
| STEP3 | Confirm Stroke | Confirm the stroke based on the application conditions and the required number of movers. |
| STEP4 | Select Encoder | Based on accuracy requirements and application conditions, select the encoder type and resolution. |
| STEP5 | Generate Module Model | Generate the model number based on the description of each series module model. |

## STEP1 Confirm Application Conditions

| Horizontal Installation | Side-hanging Installation |
|---|---|
|  |  |





Establish a rectangular coordinate system with the geometric center of the sliding platen mounting surface as the origin to confirm the load's offset from the center. Then confirm the operating speed. The maximum operating speed of the linear motor module is 2 m/s, and the maximum acceleration/deceleration is 2g (If speed > 2 m/s or acceleration > 2g, please contact the manufacturer for assisted selection). The following application conditions serve as an example for linear motor module selection.

| Application Conditions and Parameters (Selection Example) | |
|---|---|
| Installation Form | Side-hanging Installation |
| Load Weight (kg) | 30 |
| Load Center of Gravity Position (mm) | (300, 0,100) |
| Maximum Speed (m/s) | 1 |
| Acceleration (m/s$^2$) | 9.8 |
| Stroke (mm) | 1000 |

## STEP2 Select Module Series

First, filter the model series based on the load range in the overall parameter table. The example requires side-hanging installation of 30kg. Selectable models include XPLS105-B200 and above, XPLS105-C200 and above, XPLS120-B160 and above, and XPLS120-C160 and above.

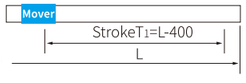
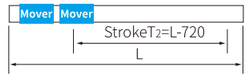
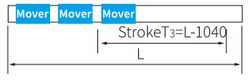
| XPLS Series Overall Parameter Table | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Model Series | Base Width (mm) | Rated Load(kg) | | Continuous Thrust (Arms) | Peak Thrust (Arms) | Stroke (mm) | | Page Number |
| | | Horizontal | Side-hanging | | | Min. | Max. | |
| **XPLS46-E50** | 46 | 3.7 | 3.1 | 10 | 28 | 80 | 860 | 07-08 |
| **XPLS46-E100** | | 8.2 | 5.4 | 19 | 58 | 50 | 830 | 09-10 |
| **XPLS60-B65** | 60 | 4.5 | 4.5 | 19 | 57.5 | 60 | 1860 | 11-13 |
| **XPLS60-B120** | | 9 | 9 | 36.8 | 111.5 | 60 | 1800 | 14-16 |
| **XPLS80-B65** | 80 | 6.2 | 5.3 | 25.4 | 76.6 | 60 | 3840 | 17-19 |
| **XPLS80-B120** | | 12 | 11 | 48.6 | 148.3 | 40 | 3760 | 20-22 |
| **XPLS80-B160** | | 17.5 | 16.5 | 70.4 | 213.8 | 60 | 3720 | 23-25 |
| **XPLS80-B200** | | 22 | 22 | 89.9 | 277.8 | 80 | 3680 | 26-28 |
| **XPLS105-B75** | 105 | 12.5 | 8.5 | 50.8 | 153 | 60 | 3840 | 29-31 |
| **XPLS105-B120** | | 25 | 19 | 97.2 | 296.5 | 40 | 3760 | 32-34 |
| **XPLS105-B160** | | 35 | 25 | 140.9 | 427.6 | 60 | 3720 | 35-37 |
| **XPLS105-B200** | | 45 | 34 | 179.8 | 554 | 80 | 3680 | 38-40 |
| **XPLS105-B280** | | 65 | 50 | 257.2 | 806 | 60 | 3600 | 41-43 |
| **XPLS120-B160** | 120 | 50 | 33 | 193.8 | 588 | 60 | 3720 | 44-46 |
| **XPLS120-B280** | | 85 | 70 | 353.6 | 1108 | 60 | 3600 | 46-49 |
| **XPLS105-C120** | 105 | 33 | 18 | 134.4 | 322 | 40 | 3760 | 50-52 |
| **XPLS105-C160** | | 49 | 23 | 193.8 | 464.5 | 60 | 3720 | 53-55 |
| **XPLS105-C200** | | 60 | 30 | 248.2 | 604.5 | 80 | 3680 | 56-58 |
| **XPLS105-C280** | | 85 | 47 | 356 | 883 | 60 | 3600 | 59-61 |
| **XPLS120-C120** | 120 | 30 | 27 | 189 | 452 | 40 | 3760 | 62-64 |
| **XPLS120-C160** | | 49 | 33 | 272.4 | 652.8 | 60 | 3720 | 65-67 |
| **XPLS120-C200** | | 70 | 43 | 348.8 | 849.5 | 80 | 3680 | 68-70 |
| **XPLS120-C280** | | 120 | 60 | 500 | 1240 | 60 | 3600 | 71-73 |
| **XPLS120-M-B80** | 120 | 12.5 | 8.6 | 68.3 | 197.8 | 60 | 3840 | 74-76 |
| **XPLS120-M-C120** | | 32 | 29 | 189 | 452 | 40 | 3760 | 77-79 |
| **XPLS120-M-C160** | | 49 | 33 | 272.4 | 652.8 | 60 | 3720 | 80-82 |
| **XPLS120-M-C200** | | 70 | 43 | 348.8 | 849.5 | 80 | 3680 | 83-85 |
| **XPLS120-M-C280** | | 120 | 60 | 500 | 1240 | 60 | 3600 | 86-88 |

Then, check in the allowable load moment table for each linear motor model whether the load corresponding to the required operating conditions is satisfied. As shown in the table below, at a speed of 1 m/s and acceleration of 9.8 m/s$^2$, the recommended maximum application load for the XPLS105-B280 is 43 kg, which meets the example's requirements. The X, Y, H data in the table represent the maximum allowable center of gravity offset of the load in the x, y, and h directions respectively. For cases where the center of gravity has offsets in all three directions, assuming the offsets are ($X_1$, $Y_1$, $H_1$), the eccentricity coefficient $a = X_1/X + Y_1/Y + H_1/H \leqslant 1$ must be satisfied. The example's load center of gravity position is (300, 0, 100), so the eccentricity coefficient.$a=X1/X+Y1/Y+H1/H\leqslant 1$.Therefore, the selection requirement is met.

| XPLS105-B280 Linear Motor Allowable Load Moment Table (Side-hanging Installation) | | | | | |
|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 50.0 | 683 | 2756 | 152 |
| | | 36.0 | 1054 | 4142 | 238 |
| | | 26.0 | 1548 | 5983 | 353 |
| | 1.5 | 39.0 | 762 | 2166 | 156 |
| | | 27.0 | 1167 | 3282 | 242 |
| | | 19.5 | 1707 | 4766 | 358 |
| | 2 | 29.0 | 867 | 1902 | 159 |
| | | 20.0 | 1319 | 2887 | 248 |
| | | 14.5 | 1921 | 4198 | 365 |
| 1 | 1 | 43.0 | 853 | 2237 | 191 |
| | | 30.0 | 1297 | 3308 | 294 |
| | | 21.0 | 1888 | 4732 | 430 |
| | 1.5 | 30.0 | 1040 | 1962 | 214 |
| | | 21.0 | 1565 | 2909 | 326 |
| | | 15.0 | 2264 | 4169 | 475 |
| | 2 | 23.0 | 1113 | 1650 | 206 |
| | | 16.5 | 1670 | 2458 | 314 |
| | | 11.5 | 2413 | 3533 | 457 |
| 1.5 | 1.5 | 23.0 | 1415 | 2067 | 292 |
| | | 16.0 | 2099 | 3027 | 437 |
| | | 11.5 | 3012 | 4307 | 631 |
| | 2 | 17.5 | 1558 | 1811 | 289 |
| | | 12.0 | 2306 | 2660 | 433 |
| | | 8.7 | 3302 | 3790 | 625 |
| 2 | 2 | 14.0 | 1975 | 1924 | 367 |
| | | 9.8 | 2902 | 2807 | 543 |
| | | 7.0 | 4137 | 3983 | 779 |

## STEP3 Confirm Stroke

Confirm the final stroke in the stroke table based on the application conditions and the required number of sliders. If a single mover is selected, the stroke T1 can be directly selected from the XPLS105-B280 linear motor stroke table. If a dual mover is selected, the stroke T2 must satisfy T2 = L - 720 mm. If a triple mover is selected, the stroke T3 must satisfy T3 = L - 1040 mm. In this example, the mover count is selected as a single mover, the stroke is selected as 1020 mm, and the total module length is 1420 mm.

| | Single Mover | Dual Mover | Triple Mover |
|---|---|---|---|
| Stroke Description |  |  |  |
| Model Code | **XPLS105-B280** | **XPLS105-B280-2** | **XPLS105-B280-3** |



| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** | **940** | **1000** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 |
| N | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 |
| Module Weight (kg) | 11.90 | 12.55 | 13.19 | 13.84 | 14.49 | 15.14 | 15.79 | 16.44 | 17.09 | 17.73 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** | **1480** | **1540** | **1600** |
| Stroke T | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 |
| N | 8 | 8 | 9 | 9 | 10 | 10 | 10 | 11 | 12 | 12 |
| Module Weight (kg) | 18.38 | 19.03 | 19.68 | 20.33 | 20.98 | 21.63 | 21.63 | 22.92 | 23.57 | 24.22 |

| Parameter | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** | **2140** | **2200** |
| Stroke T | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 |
| N | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 |
| Module Weight (kg) | 24.87 | 25.52 | 26.17 | 26.82 | 27.46 | 28.11 | 28.76 | 29.41 | 30.06 | 30.71 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** | **2740** | **2800** |
| Stroke T | 1860 | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 |
| N | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 |
| Module Weight (kg) | 31.36 | 32.00 | 32.65 | 33.30 | 33.95 | 34.60 | 35.25 | 35.90 | 36.54 | 37.19 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** | **3400** |
| Stroke T | 2460 | 2520 | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 |
| N | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Module Weight (kg) | 37.84 | 38.49 | 39.14 | 39.79 | 40.44 | 41.08 | 41.73 | 42.38 | 43.03 | 43.68 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3060 | 3120 | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 |
| N | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 | 32 |
| Module Weight (kg) | 44.33 | 44.98 | 45.63 | 46.27 | 46.92 | 47.57 | 48.22 | 48.87 | 49.52 | 50.17 |

Note: *Consider that the required thrust of the motor varies with different strokes (other conditions being the same). If the selected stroke is <1 m, motor thrust needs to be recalculated. *If the speed, acceleration, and load in the allowable load moment table do not match the requirements, or if the actual required operating life is less than/greater than 50,000 km, please contact us to calculate and select a suitable model for you.

## STEP4 Select Encoder

Select the encoder type based on the working environment. Options include DKW magnetic scale encoder and Geshu AM4 optical encoder.

| Encoder | Corresponding Code |
|---|---|
| DKW Magnetic Scale | E010 |
| Geshu AM4 Optical Scale | AE010 |

## STEP5 Generate Module Model

Assuming the encoder type DKW magnetic scale is selected and the cable length is 0.2 m, then based on the model description and selection conditions, the final model is determined as: XPLS105-B280-L1420-C010-0.2

| Model | : | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS105** | - | **B280** | - | **E010** | - | **L460** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | Ae010 (Optical Incremental 1μm)<br>Ea010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 460mm ~ 4000mm | | Blank: Single Mover 2: Dual Mover 3: Triple Mover 4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

# Linear Motor Module Precautions

## Usage Precautions

- **Operating Environment Requirements:** Linear motor modules should be used indoors at an ambient temperature of 0~40°C, relative humidity 50~80%, in dust-free and condensation-free environments.
- **Mounting Surface Accuracy Requirements:** The flatness of the linear motor module mounting surface must be ⩽50μm/1000mm. When installing the load onto the module slider, the flatness of the load's own contact surface must be ⩽0.03mm.
- **Avoid Direct Sunlight:** Please avoid direct sunlight on the installation location to prevent accuracy degradation due to temperature changes.
- **Magnetic Scale Encoder Requirements:** When the linear motor module is equipped with a magnetic scale encoder, keep magnetic objects away from the magnetic scale to prevent magnetization and damage.
- **Optical Scale Encoder Requirements:** When the linear motor module is equipped with an optical scale encoder, do not touch the scale surface with hands, and protect it from foreign objects, oil contamination, and scratches.
- **Foreign Object Prevention:** Before operating the linear motor, confirm there are no foreign objects inside the module to prevent damage.



## Safety Precautions

- **Handle with Care:** The linear motor module is a high-precision mechanism. Handle it gently during transportation to avoid personal injury or product damage.
- **Interference Warning:** During operation of the linear motor module, ensure no external objects interfere within its full stroke range. Keep hands out of this area.
- **Strong Magnet Warning:** The magnet track is a powerful magnet. Do not bring ferromagnetic materials close to the magnet track, otherwise fingers, etc., may be pinched between the magnet and metal pieces due to magnetic attraction and cause injury. Also, persons with cardiac pacemakers should not approach the magnet track.
- **Unauthorized Disassembly Prohibited:** Do not disassemble without authorization, otherwise foreign objects may enter or precision may degrade. Furthermore, it may cause the driver to become live, leading to an electric shock accident.

## Maintenance and Lubrication

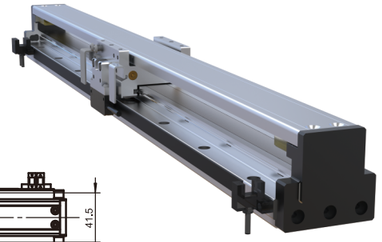
- **Periodic Lubrication:** Linear motor guides do not have an automatic lubrication system. Therefore, the guide rails need to be periodically lubricated. It is recommended to replenish lubricant every 300 km of operation; otherwise, service life will be affected.
- **Control Lubricant Quantity:** Do not apply excessive lubricant during module maintenance to prevent excessive grease on the guide rails from splashing onto the optical scale surface during operation, causing scratches and affecting the reading signal.
- **Storage Note:** During long-term storage, the internal lubricant may degrade over time. Please add lubricant again before use.
- **Special Environment Considerations:** When used in special environments such as places with frequent vibration, cleanrooms, low temperature, or high temperature, please use lubricants suitable for the specific environment.

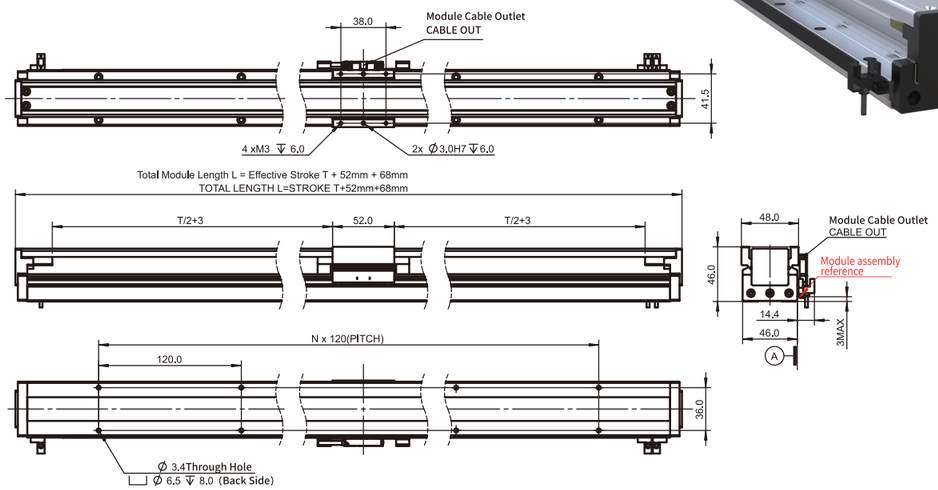
## Other Precautions

- **Installation Form:** Linear motor modules cannot be directly applied to vertical installation conditions. If vertical use is required, add counterweights, brakes, and other devices, and confirm with the manufacturer's technical personnel.
- **Tool Marks and Color Difference:** The mechanical parts of this product are machined items, so tool marks and color differences will exist on the appearance. As long as it does not affect use and main functions, minor scratches or color variations are considered normal.
- **Noise Performance Statement:** Due to the diversity of various practical application environmental factors, the product's noise level is not specifically controlled.

# XPLS Series

## XPLS46-E50 Linear Motor






| Model | : | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS46** | - | **E50** | - | **E010** | - | **L980** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 200mm ~ 980mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS46-E50 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS46-E50** | **3.7** | **3.1** | / | **±3** | **0.5~1.0** | **0.5~1.0** | **80** | **860** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **10** | **28** | **1.2** | **4** | | | | |



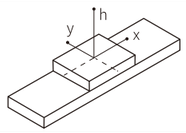
### XPLS46-E50 Linear Motor Dimensions and Weight Parameter Table

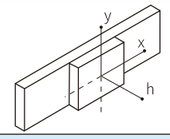
| Parameter | Total Module Length L (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **200** | **260** | **320** | **380** | **440** | **500** | **560** | **620** | **680** | **740** | **800** | **860** | **920** | **980** |
| Stroke T | 80 | 140 | 200 | 260 | 320 | 380 | 440 | 500 | 560 | 620 | 680 | 740 | 800 | 860 |
| N | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 |
| Module Weight (kg) | 1.37 | 1.52 | 1.67 | 1.82 | 1.97 | 2.12 | 2.27 | 2.42 | 2.57 | 2.72 | 2.87 | 3.02 | 3.17 | 3.32 |

**Multi-Mover Stroke Schematic Diagram**

| Stroke Description | Single Mover | Dual Mover | Triple Mover |
|---|---|---|---|
| | Mover<br>StrokeT1=L-120<br>L | Mover Mover<br>StrokeT2=L-185<br>L | Mover Mover Mover<br>StrokeT3=L-250<br>L |
| Model Code | **XPLS46-E50** | **XPLS46-E50-2** | **XPLS46-E50-3** |

**Allowable Load Moment Table**

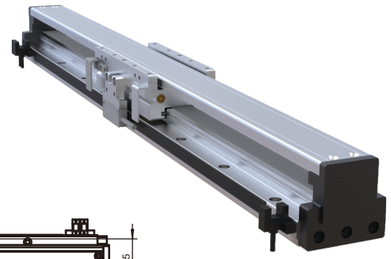


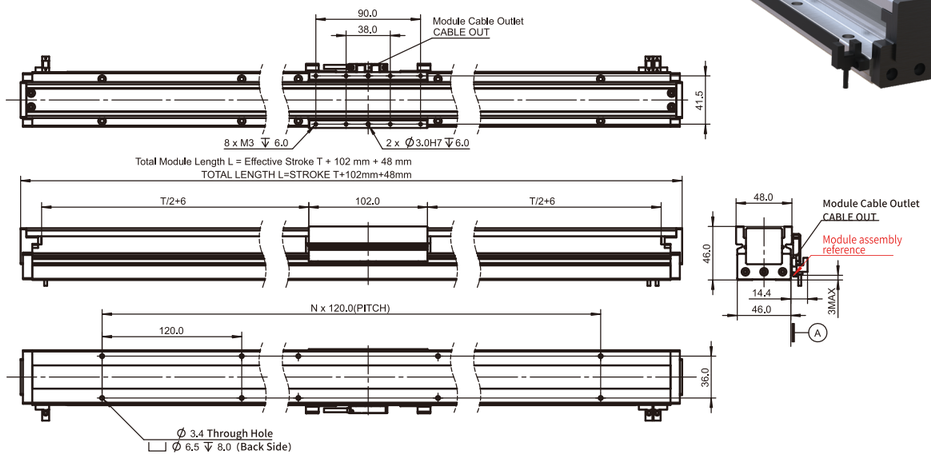




| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 0.5 | 3.7 | 11 | 30 | 79 | 0.5 | 1 | 3.1 | 15 | 90 | 29 |
| | | 2.6 | 17 | 49 | 122 | | | 2.1 | 26 | 147 | 52 |
| | | 1.8 | 27 | 77 | 185 | | | 1.5 | 39 | 217 | 81 |
| | 0.8 | 2.9 | 12 | 30 | 62 | | 1.5 | 2.3 | 19 | 94 | 30 |
| | | 2 | 20 | 50 102 | | | | 1.6 | 31 | 147 | 51 |
| | | 1.4 | 31 | 77 | 156 | | | 1.1 | 49 | 226 | 83 |
| | 1 | 2.4 | 14 | 30 | 56 | | 2 | 1.8 | 24 | 95 | 33 |
| | | 1.6 | 23 | 53 | 96 | | | 1.3 | 37 | 142 | 53 |
| | | 1.1 | 36 | 84 | 150 | | | 0.9 | 56 | 217 | 83 |
| 1 | 0.5 | 1.8 | 27 | 64 | 85 | 1 | 0.5 | 1.7 | 34 | 87 | 63 |
| | | 1.2 | 43 | 103 | 136 | | | 1.2 | 51 | 132 | 96 |
| | | 0.8 | 67 | 161 | 213 | | | 0.8 | 80 | 208 | 153 |
| | 0.8 | 1.7 | 24 | 55 | 78 | | 0.8 | 1.7 | 29 | 87 | 41 |
| | | 1.2 | 36 | 83 | 119 | | | 1.2 | 44 | 132 | 65 |
| | | 0.8 | 57 | 130 | 188 | | | 0.8 | 70 | 206 | 105 |
| | 1 | 1.5 | 25 | 51 | 66 | | 1 | 1.5 | 30 | 76 | 36 |
| | | 1 | 40 | 84 | 109 | | | 1 | 50 | 124 | 63 |
| | | 0.7 | 59 | 124 | 164 | | | 0.7 | 74 | 185 | 96 |

- If speed > 1 m/s or acceleration > 1 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 500 mm stroke and a dwell time of 0.2 s.

# XPLS46-E100 Linear Motor






| Model | : | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS46** | - | **E100** | - | **E010** | - | **L980** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 200mm ~ 980mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

## XPLS46-E100 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS46-E100** | **8.2** | **5.4** | **/** | **±3** | **0.5~1.0** | **0.5~1.0** | **50** | **830** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **19** | **58** | **1.2** | **4** | | | | |



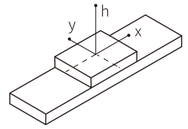
## XPLS46-E100 Linear Motor Dimensions and Weight Parameter Table

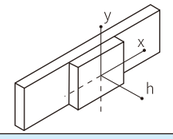
| Parameter | Total Module Length L (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **200** | **260** | **320** | **380** | **440** | **500** | **560** | **620** | **680** | **740** | **800** | **860** | **920** | **980** |
| Stroke T | 50 | 110 | 170 | 230 | 290 | 350 | 410 | 470 | 530 | 590 | 650 | 710 | 770 | 830 |
| N | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 |
| Module Weight (kg) | 1.54 | 1.69 | 1.84 | 1.99 | 2.14 | 2.29 | 2.44 | 2.59 | 2.74 | 2.89 | 3.04 | 3.19 | 3.34 | 3.49 |

### Multi-Mover Stroke Schematic Diagram

| Stroke Description | Single Mover | Dual Mover | Triple Mover |
|---|---|---|---|
| | Mover<br>StrokeT1=L-150<br>L | Mover Mover<br>StrokeT2=L-265<br>L | Mover Mover Mover<br>StrokeT3=L-380<br>L |
| Model Code | **XPLS46-E100** | **XPLS46-E100-2** | **XPLS46-E100-3** |

### Allowable Load Moment Table

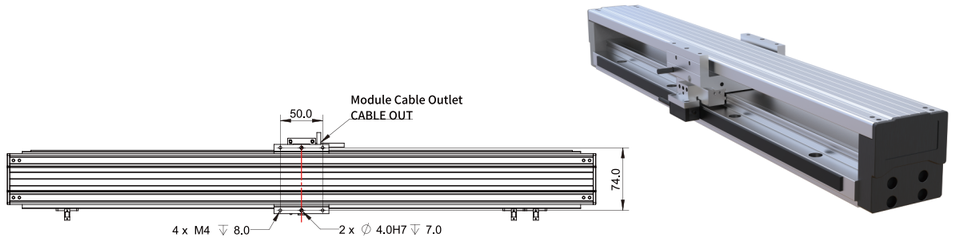



| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 0.5 | 8.2 | 40 | 28 | 340 | 0.5 | 1 | 5.4 | 77 | 522 | 40 |
| | | 5.7 | 65 | 46 | 521 | | | 3.8 | 121 | 776 | 66 |
| | | 4 | 99 | 70 | 770 | | | 2.6 | 189 | 1171 | 105 |
| | 0.8 | 5.9 | 51 | 35 | 288 | | 1.5 | 4.5 | 84 | 412 | 41 |
| | | 4.1 | 82 | 56 | 441 | | | 3.2 | 129 | 618 | 66 |
| | | 2.8 | 127 | 88 | 674 | | | 2.2 | 201 | 938 | 105 |
| | 1 | 4.8 | 60 | 40 | 270 | | 2 | 4 | 89 | 360 | 41 |
| | | 3.3 | 95 | 64 | 420 | | | 2.8 | 139 | 552 | 67 |
| | | 2.3 | 143 | 97 | 628 | | | 2 | 206 | 806 | 102 |
| 1 | 0.5 | 3.9 | 102 | 72 | 389 | 1 | 0.5 | 3.9 | 117 | 370 | 63 |
| | | 2.7 | 155 | 110 | 574 | | | 2.7 | 181 | 555 | 100 |
| | | 1.9 | 228 | 161 | 828 | | | 1.9 | 269 | 809 | 151 |
| | 0.8 | 3.9 | 87 | 59 | 309 | | 0.8 | 3.9 | 101 | 322 | 50 |
| | | 2.7 | 133 | 91 | 464 | | | 2.7 | 158 | 489 | 81 |
| | | 1.9 | 196 | 135 | 675 | | | 1.9 | 237 | 716 | 123 |
| | 1 | 3.2 | 98 | 66 | 292 | | 1 | 3.1 | 123 | 323 | 58 |
| | | 2.2 | 151 | 102 | 442 | | | 2.2 | 184 | 476 | 89 |
| | | 1.5 | 229 | 155 | 665 | | | 1.5 | 284 | 721 | 140 |

- If speed > 1 m/s or acceleration > 1 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 500 mm stroke and a dwell time of 0.2 s.

# XPLS60-B65 Linear Motor




Note: Profile cover plate with a total module length less than 1200mm
Steel strip cover plate for modules with a total length greater than 1200mm

| Model | : | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS60** | - | **B65** | - | **E010** | - | **L876** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | - | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | - | 216mm ~ 2016mm | - | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | - | 0.2m | - | Blank: Standard Configuration | - | |

XPLS60-B65 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS60-B65** | **4.5** | **4.5** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **60** | **1860** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **19** | **57.5** | **2.5** | **8.8** | | | | |



XPLS60-B65 Linear Motor Dimensions and Weight Parameter Table

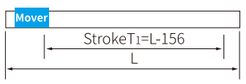
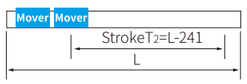
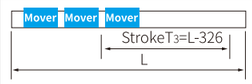
| Parameter | Total Module Length L (mm) | | | | | | |
|---|---|---|---|---|---|---|---|
| | **216** | **276** | **336** | **396** | **456** | **516** | **576** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 |
| N | 1 | 1 | 2 | 2 | 3 | 3 | 4 |
| Module Weight (kg) | 1.76 | 2.05 | 2.34 | 2.63 | 2.92 | 3.21 | 3.5 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **636** | **696** | **756** | **816** | **876** | **936** |
| Stroke T | 480 | 540 | 600 | 660 | 720 | 780 |
| N | 4 | 5 | 5 | 6 | 6 | 7 |
| Module Weight (kg) | 3.79 | 4.08 | 4.37 | 4.66 | 4.95 | 5.24 |

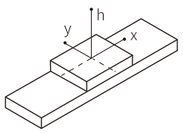
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **996** | **1056** | **1116** | **1176** | **1236** | **1296** |
| Stroke T | 840 | 900 | 960 | 1020 | 1080 | 1140 |
| N | 7 | 8 | 8 | 9 | 9 | 10 |
| Module Weight (kg) | 5.53 | 5.82 | 6.11 | 6.4 | 6.69 | 6.98 |

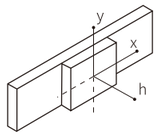
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **1356** | **1416** | **1476** | **1536** | **1596** | **1656** |
| Stroke T | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
| N | 10 | 11 | 11 | 12 | 12 | 13 |
| Module Weight (kg) | 7.27 | 7.56 | 7.85 | 8.14 | 8.43 | 8.72 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **1716** | **1776** | **1836** | **1896** | **1956** | **2016** |
| Stroke T | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 |
| N | 13 | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 9.01 | 9.3 | 9.59 | 9.88 | 10.17 | 10.46 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |   |   |   |
| Model Code | **XPLS60-B65** | **XPLS60-B65-2** | **XPLS60-B65-3** |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 4.5 | 37 | 83 | 134 |
| | | 3.2 | 55 | 126 | 201 |
| | | 2.2 | 83 | 192 | 305 |
| | 1.5 | 3.3 | 42 | 75 | 105 |
| | | 2.3 | 63 | 117 | 163 |
| | | 1.6 | 94 | 177 | 246 |
| | 2 | 2.7 | 42 | 60 | 78 |
| | | 1.8 | 67 | 102 | 131 |
| | | 1.3 | 96 | 149 | 192 |
| 1 | 1 | 2.9 | 61 | 114 | 141 |
| | | 2 | 92 | 171 | 214 |
| | | 1.4 | 134 | 250 | 316 |
| | 1.5 | 1.9 | 78 | 116 | 129 |
| | | 1.3 | 117 | 175 | 199 |
| | | 0.9 | 172 | 259 | 297 |
| | 2 | 1.5 | 82 | 103 | 104 |
| | | 1 | 126 | 161 | 168 |
| | | 0.7 | 184 | 235 | 250 |
| 1.5 | 1.5 | 1.4 | 108 | 133 | 139 |
| | | 0.9 | 172 | 213 | 227 |
| | | 0.6 | 261 | 325 | 351 |
| | 2 | 1.1 | 113 | 117 | 114 |
| | | 0.7 | 183 | 191 | 192 |
| | | 0.5 | 260 | 272 | 276 |
| 2 | 2 | 0.8 | 159 | 141 | 135 |
| | | 0.5 | 259 | 232 | 228 |
| | | 0.4 | 326 | 293 | 290 |

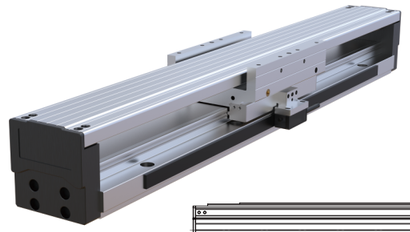
### Side-hanging Installation

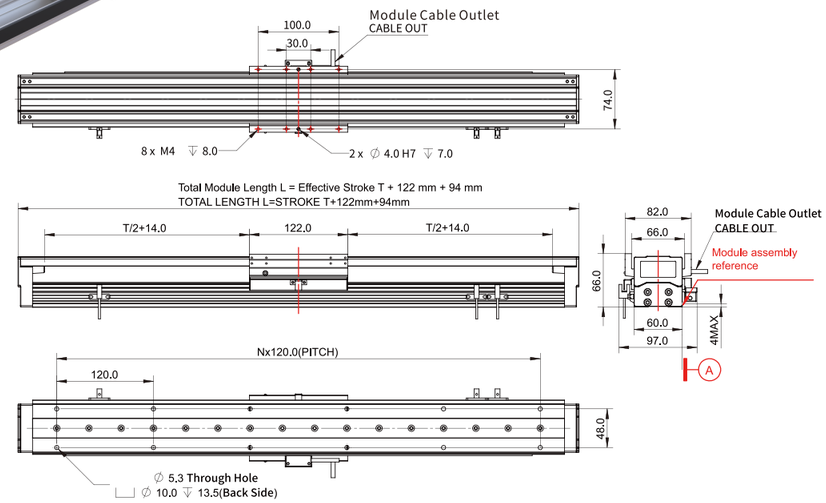
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 4.5 | 37 | 139 | 62 |
| | | 3.2 | 57 | 213 | 99 |
| | | 2.2 | 88 | 324 | 154 |
| | 1.5 | 3.2 | 44 | 121 | 57 |
| | | 2.2 | 70 | 190 | 92 |
| | | 1.5 | 108 | 292 | 145 |
| | 2 | 2.2 | 55 | 121 | 56 |
| | | 1.5 | 87 | 190 | 92 |
| | | 1.1 | 124 | 270 | 132 |
| 1 | 1 | 2.9 | 64 | 151 | 91 |
| | | 2 | 97 | 228 | 141 |
| | | 1.4 | 144 | 335 | 210 |
| | 1.5 | 1.9 | 82 | 143 | 88 |
| | | 1.3 | 126 | 219 | 137 |
| | | 0.9 | 187 | 325 | 207 |
| | 2 | 1.4 | 94 | 132 | 79 |
| | | 1 | 138 | 193 | 118 |
| | | 0.7 | 203 | 284 | 177 |
| 1.5 | 1.5 | 1.4 | 116 | 154 | 105 |
| | | 1 | 167 | 222 | 155 |
| | | 0.7 | 244 | 325 | 230 |
| | 2 | 1 | 138 | 148 | 98 |
| | | 0.7 | 202 | 218 | 149 |
| | | 0.5 | 289 | 312 | 216 |
| 2 | 2 | 0.7 | 202 | 180 | 129 |
| | | 0.5 | 288 | 258 | 187 |
| | | 0.3 | 490 | 440 | 324 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS60-B120 Linear Motor






Note: Profile cover plate with a total module length less than 1200mm
Steel strip cover plate for modules with a total length greater than 1200mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS60** | - | **B120** | - | **E010** | - | **L876** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 276mm ~ 2016mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS60-B120Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS60-B120** | **9** | **9** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **60** | **1800** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **36.8** | **111.5** | **2.4** | **8.5** | | | | |

## XPLS60-B120 Linear Motor Dimensions and Weight Parameter Table

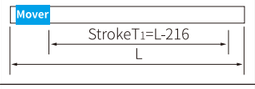
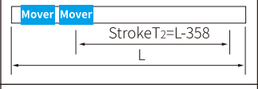
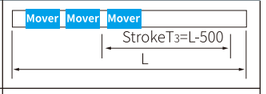
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **276** | **336** | **396** | **456** | **516** | **576** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 |
| N | 1 | 2 | 2 | 3 | 3 | 4 |
| Module Weight (kg) | 2.5 | 2.79 | 3.08 | 3.37 | 3.66 | 3.95 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **636** | **696** | **756** | **816** | **876** | **936** |
| Stroke T | 420 | 480 | 540 | 600 | 660 | 720 |
| N | 4 | 5 | 5 | 6 | 6 | 7 |
| Module Weight (kg) | 4.24 | 4.53 | 4.82 | 5.11 | 5.4 | 5.69 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **996** | **1056** | **1116** | **1176** | **1236** | **1296** |
| Stroke T | 780 | 840 | 900 | 960 | 1020 | 1080 |
| N | 7 | 8 | 8 | 9 | 9 | 10 |
| Module Weight (kg) | 5.98 | 6.27 | 6.56 | 6.85 | 7.14 | 7.43 |

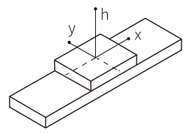
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **1356** | **1416** | **1476** | **1536** | **1596** | **1656** |
| Stroke T | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 |
| N | 10 | 11 | 11 | 12 | 12 | 13 |
| Module Weight (kg) | 7.72 | 8.01 | 8.3 | 8.59 | 8.88 | 9.17 |

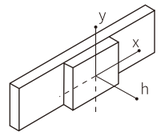
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **1716** | **1776** | **1836** | **1896** | **1956** | **2016** |
| Stroke T | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 |
| N | 13 | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 9.46 | 9.75 | 10.04 | 10.33 | 10.62 | 10.91 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS60-B120** | **XPLS60-B120-2** | **XPLS60-B120-3** |



## Allowable Load Moment Table



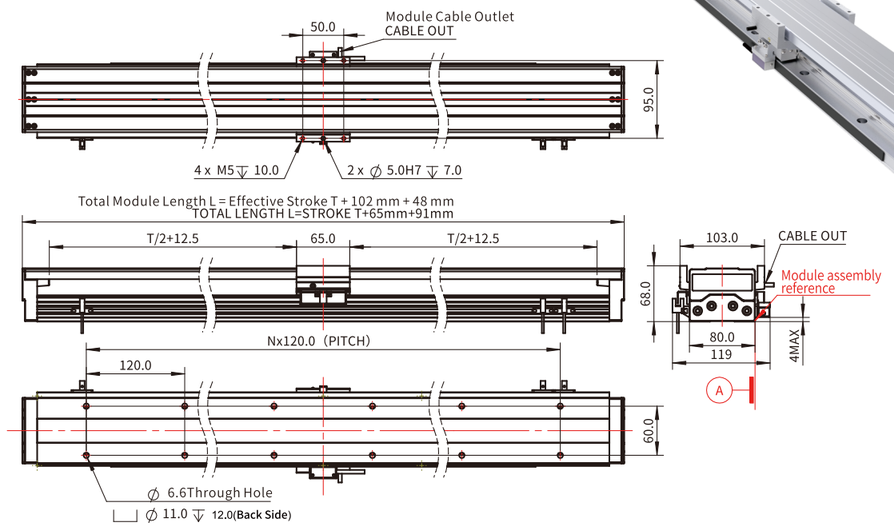




| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 9 | 113 | 95 | 447 | 0.5 | 1 | 9 | 116 | 458 | 82 |
| | | 6.3 | 170 | 144 | 664 | | | 6.3 | 180 | 689 | 128 |
| | | 4.4 | 252 | 214 | 976 | | | 4.4 | 271 | 1020 | 195 |
| | 1.5 | 6.4 | 132 | 102 | 367 | | 1.5 | 6.4 | 140 | 392 | 86 |
| | | 4.5 | 197 | 154 | 546 | | | 4.5 | 213 | 589 | 132 |
| | | 3.1 | 294 | 232 | 819 | | | 3.1 | 324 | 889 | 203 |
| | 2 | 5.2 | 135 | 94 | 282 | | 2 | 5.3 | 142 | 311 | 74 |
| | | 3.7 | 198 | 141 | 419 | | | 3.7 | 218 | 477 | 117 |
| | | 2.5 | 302 | 218 | 648 | | | 2.6 | 325 | 709 | 176 |
| 1 | 1 | 5.8 | 187 | 156 | 472 | 1 | 1 | 5.8 | 198 | 489 | 137 |
| | | 4.1 | 272 | 228 | 683 | | | 4 | 301 | 729 | 210 |
| | | 2.8 | 408 | 343 | 1018 | | | 2.8 | 443 | 1061 | 310 |
| | 1.5 | 3.9 | 230 | 176 | 423 | | 1.5 | 3.9 | 250 | 453 | 149 |
| | | 2.7 | 341 | 262 | 629 | | | 2.7 | 376 | 673 | 226 |
| | | 1.9 | 493 | 381 | 909 | | | 1.9 | 548 | 975 | 331 |
| | 2 | 3 | 248 | 172 | 360 | | 2 | 3 | 277 | 400 | 140 |
| | | 2.1 | 364 | 254 | 530 | | | 2.1 | 411 | 590 | 210 |
| | | 1.4 | 556 | 392 | 814 | | | 1.5 | 589 | 843 | 304 |
| 1.5 | 1.5 | 2.9 | 316 | 237 | 453 | 1.5 | 1.5 | 2.9 | 348 | 483 | 198 |
| | | 2 | 467 | 353 | 671 | | | 2 | 519 | 716 | 298 |
| | | 1.4 | 676 | 512 | 972 | | | 1.4 | 756 | 1037 | 436 |
| | 2 | 2.2 | 346 | 234 | 396 | | 2 | 2.1 | 410 | 459 | 198 |
| | | 1.5 | 517 | 353 | 596 | | | 1.5 | 588 | 656 | 286 |
| | | 1 | 786 | 539 | 909 | | | 1 | 900 | 1000 | 441 |
| 2 | 2 | 1.6 | 483 | 319 | 467 | 2 | 2 | 1.7 | 515 | 480 | 236 |
| | | 1.1 | 712 | 472 | 692 | | | 1.2 | 744 | 691 | 344 |
| | | 0.8 | 987 | 654 | 962 | | | 0.8 | 1133 | 1050 | 526 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

# XPLS80-B65 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS80** | - | **B65** | - | **E010**<br>AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | - | **L996** | | **2**<br>Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | - | **0.2**<br>0.2m | - | **0001**<br>Blank: Standard Configuration | - | **05 (5 meters)** |
| Selection | : | | | | | | | 216mm ~ 3996mm | | | | | | | | |

## XPLS80-B65 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS80-B65** | **6.2** | **5.3** | **±8** | **±5** | **1.0~2.0** | **0.5~2** | **60** | **3840** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **25.4** | **76.6** | **2.5** | **8.8** | | | | |



## XPLS80-B65 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **216** | **276** | **336** | **396** | **456** | **516** | **576** | **636** | **696** | **756** | **816** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 |
| N | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 |
| Module Weight (kg) | 2.26 | 2.64 | 3.01 | 3.38 | 3.76 | 4.13 | 4.51 | 4.88 | 5.26 | 5.63 | 6.01 |

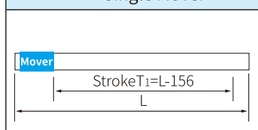
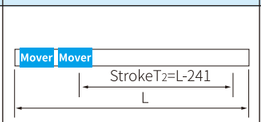
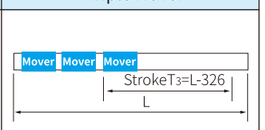
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **876** | **936** | **996** | **1056** | **1116** | **1176** | **1236** | **1296** | **1356** | **1416** |
| Stroke T | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 |
| N | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 |
| Module Weight (kg) | 6.38 | 6.75 | 7.13 | 7.5 | 7.88 | 8.25 | 8.63 | 9 | 9.38 | 9.75 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1476** | **1536** | **1596** | **1656** | **1716** | **1776** | **1836** | **1896** | **1956** | **2016** |
| Stroke T | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 |
| N | 11 | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 10.12 | 10.5 | 10.87 | 11.25 | 11.62 | 12 | 12.37 | 12.74 | 13.12 | 13.49 |

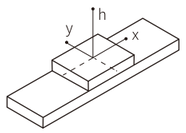
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2076** | **2136** | **2196** | **2256** | **2316** | **2376** | **2436** | **2496** | **2556** | **2616** | **2676** |
| Stroke T | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 | 2460 | 2520 |
| N | 16 | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 |
| Module Weight (kg) | 13.87 | 14.24 | 14.62 | 14.99 | 15.37 | 15.74 | 16.11 | 16.49 | 16.86 | 17.24 | 17.61 |

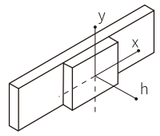
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2736** | **2796** | **2856** | **2916** | **2976** | **3036** | **3096** | **3156** | **3216** | **3276** | **3336** |
| Stroke T | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 | 3120 | 3180 |
| N | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 17.99 | 18.36 | 18.74 | 19.11 | 19.48 | 19.86 | 20.23 | 20.61 | 20.98 | 21.36 | 21.73 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **3396** | **3456** | **3516** | **3576** | **3636** | **3696** | **3756** | **3816** | **3876** | **3936** | **3996** |
| Stroke T | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 | 3660 | 3720 | 3780 | 3840 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 22.1 | 22.48 | 22.85 | 23.23 | 23.6 | 23.98 | 24.35 | 24.73 | 25.1 | 25.47 | 25.85 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS80-B65** | **XPLS80-B65-2** | **XPLS80-B65-3** |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 6.2 | 48 | 127 | 156 |
| | | 4.3 | 72 | 191 | 241 |
| | | 3.1 | 104 | 275 | 355 |
| | 1.5 | 4.5 | 55 | 111 | 124 |
| | | 3.2 | 82 | 174 | 196 |
| | | 2.3 | 118 | 251 | 291 |
| | 2 | 3.5 | 60 | 94 | 101 |
| | | 2.4 | 90 | 152 | 163 |
| | | 1.7 | 129 | 228 | 245 |
| 1 | 1 | 4 | 78 | 121 | 149 |
| | | 2.8 | 115 | 186 | 229 |
| | | 2 | 164 | 273 | 336 |
| | 1.5 | 2.7 | 97 | 145 | 143 |
| | | 1.9 | 143 | 216 | 221 |
| | | 1.3 | 203 | 311 | 324 |
| | 2 | 2.1 | 104 | 130 | 119 |
| | | 1.5 | 154 | 194 | 186 |
| | | 1 | 220 | 279 | 275 |
| 1.5 | 1.5 | 2 | 129 | 154 | 146 |
| | | 1.4 | 188 | 229 | 224 |
| | | 1 | 268 | 329 | 328 |
| | 2 | 1.5 | 148 | 147 | 132 |
| | | 1 | 217 | 219 | 204 |
| | | 0.7 | 309 | 314 | 300 |
| 2 | 2 | 1.2 | 181 | 152 | 134 |
| | | 0.9 | 265 | 226 | 206 |
| | | 0.6 | 377 | 324 | 303 |

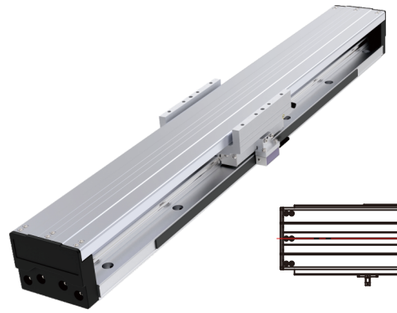
### Side-hanging Installation

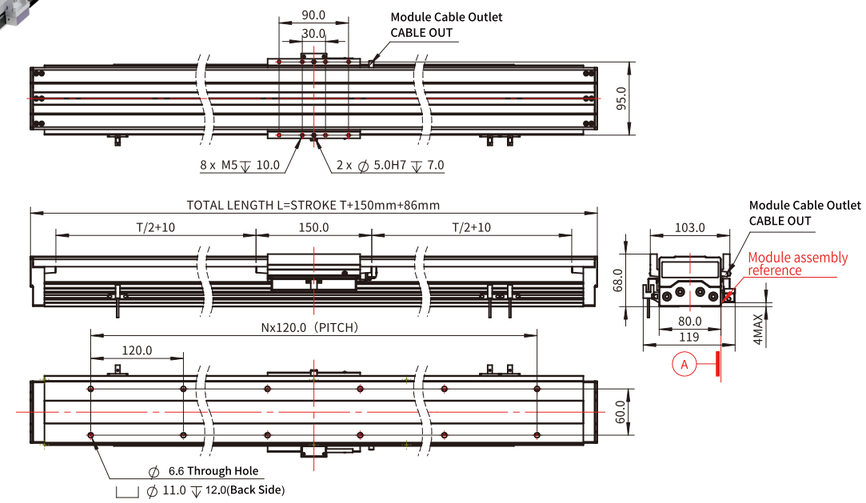
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 5.3 | 56 | 202 | 109 |
| | | 3.7 | 86 | 307 | 172 |
| | | 2.7 | 125 | 445 | 256 |
| | 1.5 | 3.4 | 76 | 201 | 110 |
| | | 2.3 | 114 | 304 | 173 |
| | | 1.7 | 166 | 441 | 257 |
| | 2 | 2.3 | 96 | 206 | 111 |
| | | 1.6 | 145 | 312 | 175 |
| | | 1.1 | 210 | 452 | 260 |
| 1 | 1 | 4.0 | 79 | 141 | 114 |
| | | 2.8 | 118 | 220 | 179 |
| | | 2.0 | 170 | 326 | 265 |
| | 1.5 | 2.5 | 106 | 176 | 116 |
| | | 1.8 | 158 | 264 | 182 |
| | | 1.3 | 227 | 382 | 268 |
| | 2 | 1.6 | 137 | 186 | 120 |
| | | 1.2 | 204 | 279 | 187 |
| | | 0.8 | 293 | 402 | 276 |
| 1.5 | 1.5 | 2.0 | 135 | 169 | 121 |
| | | 1.4 | 200 | 253 | 187 |
| | | 1.0 | 286 | 365 | 276 |
| | 2 | 2 | 164 | 168 | 116 |
| | | 1.0 | 242 | 251 | 180 |
| | | 0.7 | 347 | 362 | 266 |
| 2 | 2 | 1.2 | 201 | 170 | 121 |
| | | 0.8 | 297 | 253 | 188 |
| | | 0.6 | 423 | 364 | 277 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS80-B120 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | : | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS80** | - | **B120** | - | **E010** | - | **L996** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 276mm ~ 3996mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS80-B120Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS80-B120** | **11.5** | **11.5** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **40** | **3760** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **48.6** | **148.3** | **2.4** | **8.5** | | | | |

## XPLS80-B120 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **276** | **336** | **396** | **456** | **516** | **576** | **636** | **696** | **756** | **816** |
| Stroke T | 40 | 100 | 160 | 220 | 280 | 340 | 400 | 460 | 520 | 580 |
| N | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 |
| Module Weight (kg) | 3.08 | 3.45 | 3.83 | 4.2 | 4.58 | 4.95 | 5.32 | 5.7 | 6.07 | 6.45 |

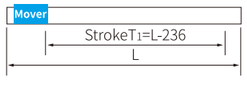
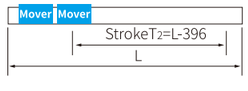
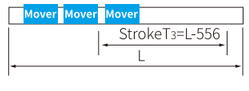
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **876** | **936** | **996** | **1056** | **1116** | **1176** | **1236** | **1296** | **1356** | **1416** |
| Stroke T | 640 | 700 | 760 | 820 | 880 | 940 | 1000 | 1060 | 1120 | 1180 |
| N | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 |
| Module Weight (kg) | 6.82 | 7.2 | 7.57 | 7.95 | 8.32 | 8.69 | 9.07 | 9.44 | 9.82 | 10.19 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1476** | **1536** | **1596** | **1656** | **1716** | **1776** | **1836** | **1896** | **1956** | **2016** |
| Stroke T | 1240 | 1300 | 1360 | 1420 | 1480 | 1540 | 1600 | 1660 | 1720 | 1780 |
| N | 11 | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 10.57 | 10.94 | 11.31 | 11.69 | 12.06 | 12.44 | 12.81 | 13.19 | 13.56 | 13.94 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2076** | **2136** | **2196** | **2256** | **2316** | **2376** | **2436** | **2496** | **2556** | **2616** | **2676** |
| Stroke T | 1840 | 1900 | 1960 | 2020 | 2080 | 2140 | 2200 | 2260 | 2320 | 2380 | 2440 |
| N | 16 | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 |
| Module Weight (kg) | 14.31 | 14.68 | 15.06 | 15.43 | 15.81 | 16.18 | 16.56 | 16.93 | 17.31 | 17.68 | 18.05 |

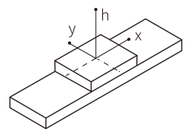
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2736** | **2796** | **2856** | **2916** | **2976** | **3036** | **3096** | **3156** | **3216** | **3276** | **3336** |
| Stroke T | 2500 | 2560 | 2620 | 2680 | 2740 | 2800 | 2860 | 2920 | 2980 | 3040 | 3100 |
| N | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 18.43 | 18.8 | 19.18 | 19.55 | 19.93 | 20.3 | 20.67 | 21.05 | 21.42 | 21.8 | 22.17 |

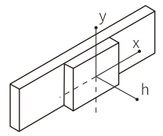
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **3396** | **3456** | **3516** | **3576** | **3636** | **3696** | **3756** | **3816** | **3876** | **3936** | **3996** |
| Stroke T | 3160 | 3220 | 3280 | 3340 | 3400 | 3460 | 3520 | 3580 | 3640 | 3700 | 3760 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 22.55 | 22.92 | 23.3 | 23.67 | 24.04 | 24.42 | 24.79 | 25.17 | 25.54 | 25.92 | 26.29 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS80-B120** | **XPLS80-B120-2** | **XPLS80-B120-3** |



## Allowable Load Moment Table




### Horizontal Installation

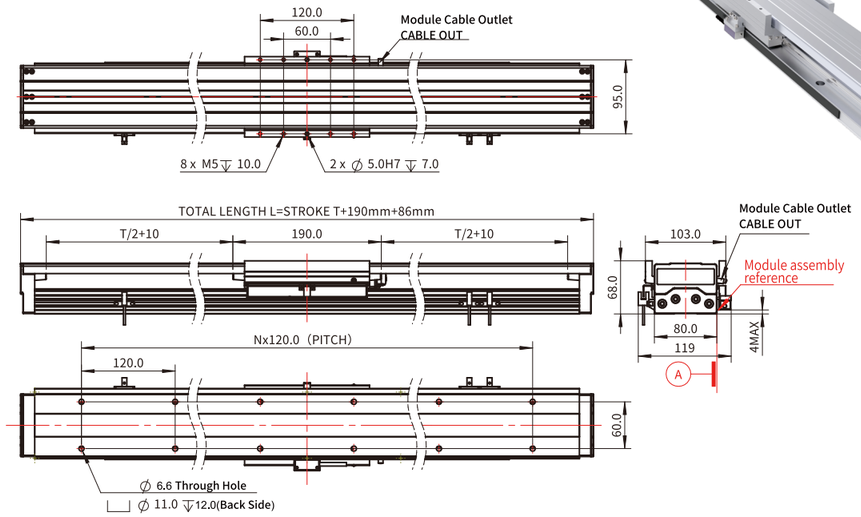
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 12.0 | 167 | 183 | 612 |
| | | 8.4 | 247 | 273 | 905 |
| | | 6.0 | 353 | 393 | 1296 |
| | 1.5 | 8.6 | 195 | 192 | 513 |
| | | 6.0 | 287 | 286 | 763 |
| | | 4.3 | 410 | 412 | 1096 |
| | 2 | 7.1 | 199 | 173 | 403 |
| | | 5.0 | 293 | 260 | 606 |
| | | 3.6 | 419 | 377 | 876 |
| 1 | 1 | 7.8 | 266 | 286 | 620 |
| | | 5.5 | 388 | 420 | 909 |
| | | 3.9 | 551 | 599 | 1293 |
| | 1.5 | 5.3 | 329 | 314 | 565 |
| | | 3.7 | 478 | 462 | 830 |
| | | 2.7 | 678 | 658 | 1182 |
| | 2 | 4.2 | 355 | 299 | 484 |
| | | 2.9 | 516 | 441 | 714 |
| | | 2.1 | 731 | 631 | 1019 |
| 1.5 | 1.5 | 4.0 | 440 | 394 | 585 |
| | | 2.8 | 638 | 572 | 856 |
| | | 2.0 | 901 | 809 | 1216 |
| | 2 | 3.0 | 495 | 393 | 528 |
| | | 2.1 | 717 | 570 | 774 |
| | | 1.5 | 1012 | 807 | 1102 |
| 2 | 2 | 2.3 | 644 | 460 | 575 |
| | | 1.6 | 929 | 666 | 840 |
| | | 1.2 | 1309 | 941 | 1193 |

### Side-hanging Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 11.0 | 180 | 678 | 167 |
| | | 7.7 | 273 | 1010 | 257 |
| | | 5.5 | 397 | 1452 | 377 |
| | 1.5 | 7.6 | 224 | 612 | 177 |
| | | 5.3 | 337 | 913 | 271 |
| | | 3.8 | 487 | 1315 | 396 |
| | 2 | 5.6 | 266 | 578 | 180 |
| | | 3.9 | 398 | 864 | 275 |
| | | 2.8 | 574 | 1244 | 401 |
| 1 | 1 | 7.8 | 272 | 617 | 240 |
| | | 5.4 | 403 | 914 | 361 |
| | | 3.9 | 579 | 1311 | 522 |
| | 1.5 | 5.3 | 341 | 597 | 252 |
| | | 3.7 | 504 | 877 | 377 |
| | | 2.6 | 721 | 1250 | 544 |
| | 2 | 4.1 | 373 | 526 | 231 |
| | | 2.9 | 551 | 775 | 347 |
| | | 2.1 | 788 | 1108 | 502 |
| 1.5 | 1.5 | 4.0 | 467 | 625 | 320 |
| | | 2.8 | 683 | 912 | 475 |
| | | 2.0 | 972 | 1294 | 680 |
| | 2 | 3.0 | 522 | 567 | 298 |
| | | 2.1 | 763 | 828 | 443 |
| | | 1.5 | 1086 | 1177 | 635 |
| 2 | 2 | 2.3 | 687 | 619 | 365 |
| | | 1.6 | 1000 | 900 | 537 |
| | | 1.2 | 1417 | 1276 | 767 |

# XPLS80-B160 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | : | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS80** | - | **B160** | - | **E010** | - | **L996** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 336mm ~ 3996mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

**XPLS80-B160 Linear Motor Performance Parameter Table**

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS80-B160** | **17.5** | **16.5** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **60** | **3720** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **70.4** | **213.8** | **2.3** | **8** | | | | |



**XPLS80-B160 Linear Motor Dimensions and Weight Parameter Table**

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **336** | **396** | **456** | **516** | **576** | **636** | **696** | **756** | **816** | **876** | **936** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 |
| N | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 |
| Module Weight (kg) | 3.94 | 4.31 | 4.69 | 5.06 | 5.44 | 5.81 | 6.19 | 6.56 | 6.93 | 7.31 | 7.68 |

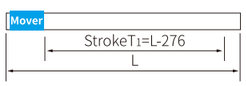
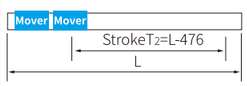
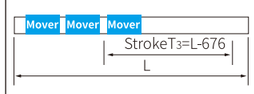
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **996** | **1056** | **1116** | **1176** | **1236** | **1296** | **1356** | **1416** | **1476** | **1536** |
| Stroke T | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 |
| N | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 |
| Module Weight (kg) | 8.06 | 8.43 | 8.81 | 9.18 | 9.56 | 9.93 | 10.3 | 10.68 | 11.05 | 11.43 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1596** | **1656** | **1716** | **1776** | **1836** | **1896** | **1956** | **2016** | **2076** | **2136** |
| Stroke T | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 |
| N | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 |
| Module Weight (kg) | 11.8 | 12.18 | 12.55 | 12.92 | 13.3 | 13.67 | 14.05 | 14.42 | 14.8 | 15.17 |

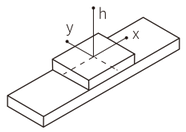
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2196** | **2256** | **2316** | **2376** | **2436** | **2496** | **2556** | **2616** | **2676** | **2736** |
| Stroke T | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 | 2460 |
| N | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 |
| Module Weight (kg) | 15.55 | 15.92 | 16.29 | 16.67 | 17.04 | 17.42 | 17.79 | 18.17 | 18.54 | 18.92 |

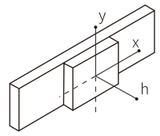
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2796** | **2856** | **2916** | **2976** | **3036** | **3096** | **3156** | **3216** | **3276** | **3336** |
| Stroke T | 2520 | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 |
| N | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 19.29 | 19.66 | 20.04 | 20.41 | 20.79 | 21.16 | 21.54 | 21.91 | 22.28 | 22.66 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **3396** | **3456** | **3516** | **3576** | **3636** | **3696** | **3756** | **3816** | **3876** | **3936** | **3996** |
| Stroke T | 3120 | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 | 3660 | 3720 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 23.03 | 23.41 | 23.78 | 24.16 | 24.53 | 24.91 | 25.28 | 25.65 | 26.03 | 26.4 | 26.78 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS80-B160** | **XPLS80-B160-2** | **XPLS80-B160-3** |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 17.5 | 214 | 183 | 797 |
| | | 12.0 | 316 | 272 | 1175 |
| | | 8.7 | 453 | 391 | 1679 |
| | 1.5 | 12.5 | 249 | 196 | 666 |
| | | 8.8 | 366 | 291 | 987 |
| | | 6.3 | 523 | 419 | 1415 |
| | 2 | 10.5 | 256 | 182 | 528 |
| | | 7.2 | 377 | 272 | 789 |
| | | 5.1 | 537 | 393 | 1137 |
| 1 | 1 | 11.5 | 342 | 290 | 813 |
| | | 7.9 | 499 | 425 | 1187 |
| | | 5.7 | 709 | 605 | 1686 |
| | 1.5 | 7.7 | 418 | 324 | 734 |
| | | 5.4 | 609 | 475 | 1073 |
| | | 3.9 | 862 | 676 | 1526 |
| | 2 | 6.0 | 458 | 320 | 638 |
| | | 4.2 | 666 | 471 | 936 |
| | | 3.0 | 942 | 671 | 1333 |
| 1.5 | 1.5 | 5.8 | 567 | 429 | 769 |
| | | 4.1 | 820 | 625 | 1120 |
| | | 2.9 | 1159 | 887 | 1589 |
| | 2 | 4.4 | 631 | 429 | 688 |
| | | 3.1 | 913 | 626 | 1004 |
| | | 2.2 | 1288 | 889 | 1426 |
| 2 | 2 | 3.4 | 812 | 523 | 743 |
| | | 2.4 | 1172 | 757 | 1080 |
| | | 1.7 | 1651 | 1068 | 1530 |

### Side-hanging Installation

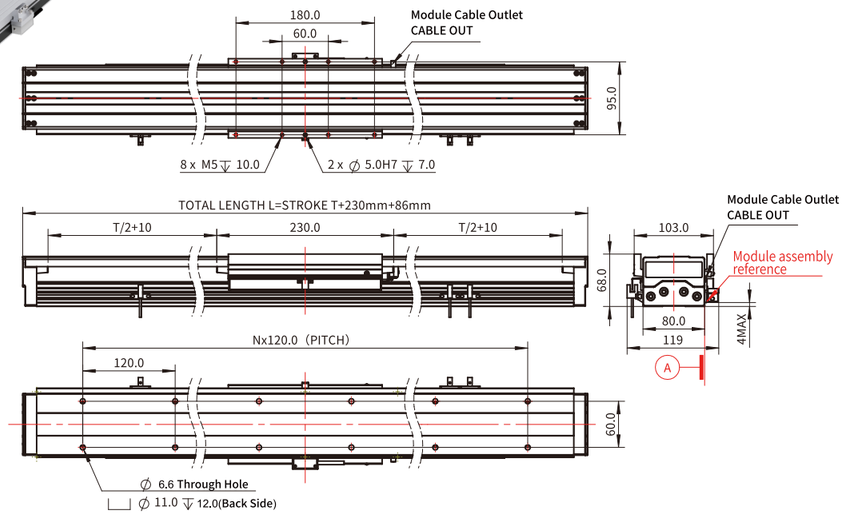
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 16.5 | 222 | 843 | 161 |
| | | 11.5 | 337 | 1257 | 249 |
| | | 8.3 | 491 | 1807 | 367 |
| | 1.5 | 12.0 | 266 | 730 | 170 |
| | | 8.3 | 401 | 1093 | 261 |
| | | 6.0 | 581 | 1576 | 382 |
| | 2 | 8.7 | 314 | 683 | 175 |
| | | 6.1 | 471 | 1023 | 268 |
| | | 4.4 | 681 | 1476 | 391 |
| 1 | 1 | 11.5 | 350 | 837 | 250 |
| | | 7.9 | 520 | 1226 | 375 |
| | | 5.6 | 747 | 1745 | 542 |
| | 1.5 | 7.7 | 436 | 769 | 268 |
| | | 5.4 | 644 | 1128 | 401 |
| | | 3.9 | 921 | 1607 | 578 |
| | 2 | 6.0 | 483 | 685 | 255 |
| | | 4.2 | 712 | 1008 | 382 |
| | | 3.0 | 1019 | 1438 | 551 |
| 1.5 | 1.5 | 5.8 | 600 | 812 | 353 |
| | | 4.0 | 879 | 1182 | 521 |
| | | 2.9 | 1250 | 1676 | 746 |
| | 2 | 4.3 | 684 | 749 | 342 |
| | | 3.0 | 1000 | 1093 | 506 |
| | | 2.2 | 1421 | 1551 | 724 |
| 2 | 2 | 3.5 | 874 | 794 | 413 |
| | | 2.4 | 1271 | 1154 | 607 |
| | | 1.7 | 1800 | 1633 | 865 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS80-B200 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | : | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS80** | - | **B200** | - | **E010** | - | **L996** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 396mm ~ 3996mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS80-B200Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS80-B200** | **22** | **22** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **80** | **3680** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **89.9** | **277.8** | **4.4** | **15.4** | | | | |

## XPLS80-B200 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **396** | **456** | **516** | **576** | **636** | **696** | **756** | **816** | **876** | **936** |
| Stroke T | 80 | 140 | 200 | 260 | 320 | 380 | 440 | 500 | 560 | 620 |
| N | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 |
| Module Weight (kg) | 4.89 | 5.27 | 5.64 | 6.01 | 6.39 | 6.76 | 7.14 | 7.51 | 7.89 | 8.26 |

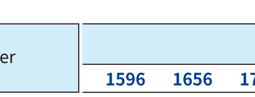
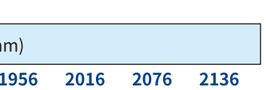
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **996** | **1056** | **1116** | **1176** | **1236** | **1296** | **1356** | **1416** | **1476** | **1536** |
| Stroke T | 680 | 740 | 800 | 860 | 920 | 980 | 1040 | 1100 | 1160 | 1220 |
| N | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 |
| Module Weight (kg) | 8.63 | 9.01 | 9.38 | 9.76 | 10.13 | 10.51 | 10.88 | 11.26 | 11.63 | 12 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1596** | **1656** | **1716** | **1776** | **1836** | **1896** | **1956** | **2016** | **2076** | **2136** |
| Stroke T | 1280 | 1340 | 1400 | 1460 | 1520 | 1580 | 1640 | 1700 | 1760 | 1820 |
| N | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 |
| Module Weight (kg) | 12.38 | 12.75 | 13.13 | 13.5 | 13.88 | 14.25 | 14.63 | 15 | 15.37 | 15.75 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2196** | **2256** | **2316** | **2376** | **2436** | **2496** | **2556** | **2616** | **2676** | **2736** |
| Stroke T | 1880 | 1940 | 2000 | 2060 | 2120 | 2180 | 2240 | 2300 | 2360 | 2420 |
| N | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 |
| Module Weight (kg) | 16.12 | 16.5 | 16.87 | 17.25 | 17.62 | 17.99 | 18.37 | 18.74 | 19.12 | 19.49 |

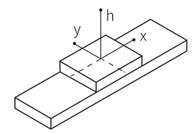
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2796** | **2856** | **2916** | **2976** | **3036** | **3096** | **3156** | **3216** | **3276** | **3336** |
| Stroke T | 2480 | 2540 | 2600 | 2660 | 2720 | 2780 | 2840 | 2900 | 2960 | 3020 |
| N | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 19.87 | 20.24 | 20.62 | 20.99 | 21.36 | 21.74 | 22.11 | 22.49 | 22.86 | 23.24 |

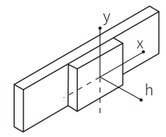
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **3396** | **3456** | **3516** | **3576** | **3636** | **3696** | **3756** | **3816** | **3876** | **3936** | **3996** |
| Stroke T | 3080 | 3140 | 3200 | 3260 | 3320 | 3380 | 3440 | 3500 | 3560 | 3620 | 3680 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 23.61 | 23.99 | 24.36 | 24.73 | 25.11 | 25.48 | 25.86 | 26.23 | 26.61 | 26.98 | 27.35 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS80-B200** | **XPLS80-B200-2** | **XPLS80-B200-3** |



## Allowable Load Moment Table



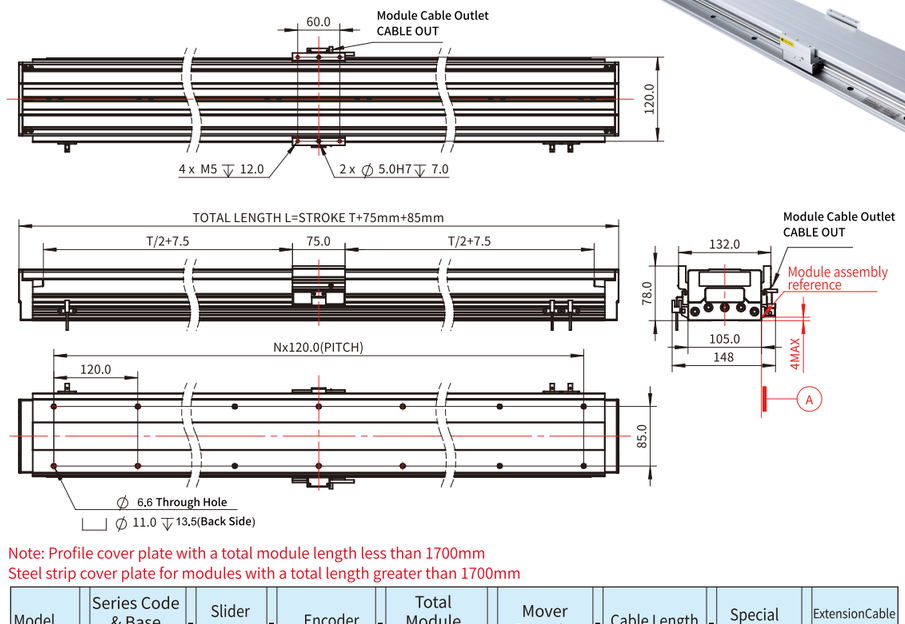




| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 22.0 | 279 | 196 | 1046 | 0.5 | 1 | 22.0 | 275 | 1049 | 166 |
| | | 15.5 | 411 | 291 | 1535 | | | 15.5 | 418 | 1561 | 256 |
| | | 11.0 | 588 | 417 | 2188 | | | 11.0 | 608 | 2243 | 377 |
| | 1.5 | 16.0 | 322 | 212 | 871 | | 1.5 | 16.0 | 325 | 896 | 176 |
| | | 11.0 | 474 | 314 | 1285 | | | 11.0 | 490 | 1340 | 270 |
| | | 8.0 | 675 | 450 | 1837 | | | 8.0 | 711 | 1930 | 395 |
| | 2 | 13.0 | 331 | 200 | 692 | | 2 | 12.5 | 360 | 785 | 172 |
| | | 9.2 | 486 | 298 | 1029 | | | 8.7 | 542 | 1178 | 264 |
| | | 6.5 | 693 | 428 | 1477 | | | 6.2 | 784 | 1702 | 386 |
| 1 | 1 | 14.5 | 445 | 311 | 1067 | 1 | 1 | 14.5 | 456 | 1092 | 273 |
| | | 10.0 | 649 | 456 | 1552 | | | 10.0 | 676 | 1596 | 409 |
| | | 7.2 | 921 | 648 | 2199 | | | 7.2 | 969 | 2267 | 590 |
| | 1.5 | 9.7 | 549 | 357 | 971 | | 1.5 | 9.8 | 568 | 1005 | 301 |
| | | 6.8 | 797 | 522 | 1415 | | | 6.9 | 838 | 1471 | 448 |
| | | 4.9 | 1128 | 742 | 2007 | | | 4.9 | 1197 | 2091 | 645 |
| | 2 | 7.5 | 598 | 357 | 842 | | 2 | 7.5 | 635 | 904 | 295 |
| | | 5.3 | 867 | 523 | 1230 | | | 5.3 | 935 | 1325 | 438 |
| | | 3.8 | 1226 | 744 | 1748 | | | 3.8 | 1334 | 1886 | 630 |
| 1.5 | 1.5 | 7.3 | 741 | 475 | 1016 | 1.5 | 1.5 | 7.3 | 781 | 1060 | 401 |
| | | 5.1 | 1072 | 691 | 1475 | | | 5.1 | 1142 | 1540 | 590 |
| | | 3.7 | 1513 | 978 | 2086 | | | 3.7 | 1623 | 2180 | 843 |
| | 2 | 5.5 | 837 | 491 | 925 | | 2 | 5.5 | 894 | 983 | 398 |
| | | 3.8 | 1210 | 714 | 1344 | | | 3.8 | 1305 | 1429 | 586 |
| | | 2.7 | 1706 | 1012 | 1903 | | | 2.7 | 1852 | 2025 | 836 |
| 2 | 2 | 4.3 | 1069 | 613 | 990 | 2 | 2 | 4.2 | 1172 | 1069 | 499 |
| | | 3.0 | 1541 | 890 | 1434 | | | 3.0 | 1702 | 1549 | 730 |
| | | 2.2 | 2171 | 1258 | 2028 | | | 2.1 | 2408 | 2189 | 1039 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

# XPLS105-B75 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS105** | - | **B75** | - | **E010** | - | **L1000** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 220mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

**XPLS105-B75 Linear Motor Performance Parameter Table**

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS105-B75** | **12.5** | **8.5** | **±8** | **±5** | **1.0~2.0** | **0.5~2** | **60** | **3840** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **50.8** | **153** | **2.5** | **8.8** | | | | |



**XPLS105-B75 Linear Motor Dimensions and Weight Parameter Table**

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **220** | **280** | **340** | **400** | **460** | **520** | **580** | **640** | **700** | **760** | **820** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 |
| N | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 |
| Module Weight (kg) | 3.66 | 4.28 | 4.91 | 5.54 | 6.16 | 6.79 | 7.42 | 8.04 | 8.67 | 9.3 | 9.92 |

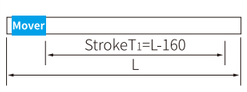
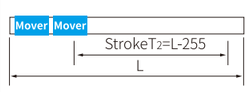
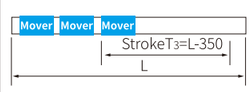
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **880** | **940** | **1000** | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** |
| Stroke T | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 |
| N | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 |
| Module Weight (kg) | 10.55 | 11.18 | 11.81 | 12.43 | 13.06 | 13.69 | 14.31 | 14.94 | 15.57 | 16.19 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1480** | **1540** | **1600** | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** |
| Stroke T | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 |
| N | 11 | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 16.82 | 17.45 | 18.08 | 18.7 | 19.33 | 19.96 | 20.58 | 21.21 | 21.84 | 22.46 |

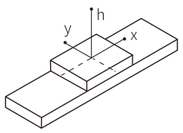
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2080** | **2140** | **2200** | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** |
| Stroke T | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 | 2460 | 2520 |
| N | 16 | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 |
| Module Weight (kg) | 23.09 | 23.72 | 24.35 | 24.97 | 25.6 | 26.23 | 26.85 | 27.48 | 28.11 | 28.73 | 29.36 |

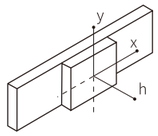
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2740** | **2800** | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** |
| Stroke T | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 | 3120 | 3180 |
| N | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 29.99 | 30.61 | 31.24 | 31.87 | 32.5 | 33.12 | 33.75 | 34.38 | 35 | 35.63 | 36.26 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **3400** | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 | 3660 | 3720 | 3780 | 3840 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 36.88 | 37.51 | 38.14 | 38.77 | 39.39 | 40.02 | 40.65 | 41.27 | 41.9 | 42.53 | 43.15 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS105-B75** | **XPLS105-B75-2** | **XPLS105-B75-3** |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 12.5 | 59 | 166 | 205 |
| | | 8.8 | 88 | 247 | 311 |
| | | 6.3 | 127 | 355 | 452 |
| | 1.5 | 9.1 | 68 | 151 | 165 |
| | | 6.4 | 101 | 225 | 253 |
| | | 4.6 | 145 | 324 | 372 |
| | 2 | 6.5 | 80 | 144 | 149 |
| | | 4.6 | 119 | 223 | 232 |
| | | 3.3 | 171 | 322 | 341 |
| 1 | 1 | 8.2 | 95 | 165 | 200 |
| | | 5.7 | 139 | 248 | 300 |
| | | 4.1 | 198 | 359 | 435 |
| | 1.5 | 5.7 | 114 | 181 | 182 |
| | | 4.0 | 167 | 267 | 276 |
| | | 2.8 | 238 | 382 | 400 |
| | 2 | 4.4 | 124 | 164 | 154 |
| | | 3.0 | 182 | 242 | 236 |
| | | 2.2 | 260 | 347 | 344 |
| 1.5 | 1.5 | 4.3 | 153 | 194 | 189 |
| | | 3.0 | 223 | 286 | 284 |
| | | 2.1 | 316 | 408 | 411 |
| | 2 | 3.2 | 173 | 183 | 169 |
| | | 2.2 | 253 | 269 | 256 |
| | | 1.6 | 359 | 384 | 371 |
| 2 | 2 | 2.6 | 215 | 191 | 175 |
| | | 1.8 | 312 | 281 | 263 |
| | | 1.3 | 442 | 401 | 381 |

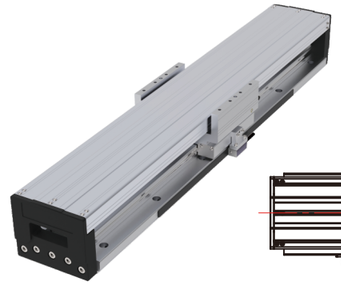
### Side-hanging Installation

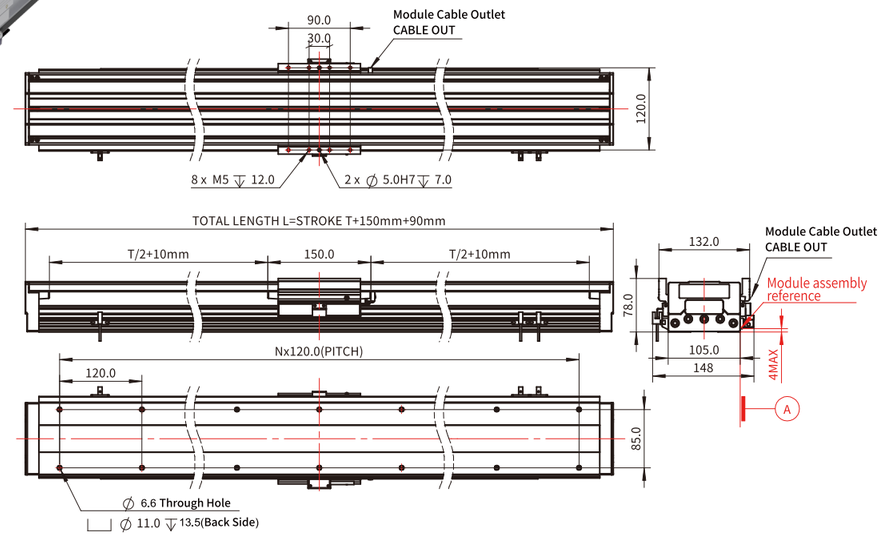
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 8.5 | 95 | 345 | 204 |
| | | 5.9 | 141 | 511 | 307 |
| | | 4.2 | 203 | 731 | 444 |
| | 1.5 | 5.3 | 129 | 346 | 208 |
| | | 3.7 | 191 | 512 | 311 |
| | | 2.7 | 273 | 732 | 450 |
| | 2 | 3.5 | 169 | 366 | 216 |
| | | 2.4 | 249 | 539 | 323 |
| | | 1.7 | 356 | 770 | 466 |
| 1 | 1 | 6.3 | 133 | 265 | 218 |
| | | 4.4 | 195 | 396 | 326 |
| | | 3.1 | 279 | 570 | 469 |
| | 1.5 | 4.0 | 178 | 303 | 217 |
| | | 2.8 | 260 | 445 | 324 |
| | | 2.0 | 371 | 634 | 466 |
| | 2 | 2.6 | 230 | 318 | 223 |
| | | 1.8 | 336 | 467 | 332 |
| | | 1.3 | 478 | 665 | 478 |
| 1.5 | 1.5 | 3.2 | 221 | 288 | 221 |
| | | 2.3 | 323 | 421 | 329 |
| | | 1.6 | 458 | 600 | 473 |
| | 2 | 2.1 | 286 | 304 | 228 |
| | | 1.5 | 417 | 445 | 339 |
| | | 1.1 | 591 | 632 | 487 |
| 2 | 2 | 1.9 | 325 | 285 | 222 |
| | | 1.3 | 472 | 417 | 329 |
| | | 0.9 | 669 | 592 | 473 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS105-B120 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS105** | - | **B120** | - | **E010** | - | **L1000** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 280mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS105-B120 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS105-B120** | **25.0** | **19.0** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **40** | **3760** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **97.2** | **296.5** | **2.4** | **8.5** | | | | |

## XPLS105-B120 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **280** | **340** | **400** | **460** | **520** | **580** | **640** | **700** | **760** | **820** |
| Stroke T | 40 | 100 | 160 | 220 | 280 | 340 | 400 | 460 | 520 | 580 |
| N | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 |
| Module Weight (kg) | 4.88 | 5.51 | 6.14 | 6.76 | 7.39 | 8.02 | 8.65 | 9.27 | 9.9 | 10.53 |

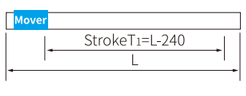
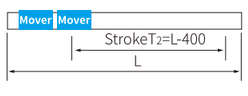
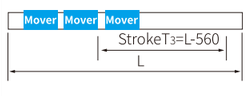
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **880** | **940** | **1000** | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** |
| Stroke T | 640 | 700 | 760 | 820 | 880 | 940 | 1000 | 1060 | 1120 | 1180 |
| N | 6 | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 |
| Module Weight (kg) | 11.15 | 11.78 | 12.41 | 13.03 | 13.66 | 14.29 | 14.92 | 15.54 | 16.17 | 16.8 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1480** | **1540** | **1600** | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** |
| Stroke T | 1240 | 1300 | 1360 | 1420 | 1480 | 1540 | 1600 | 1660 | 1720 | 1780 |
| N | 11 | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 17.42 | 18.05 | 18.68 | 19.3 | 19.93 | 20.56 | 21.19 | 21.81 | 22.44 | 23.07 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2080** | **2140** | **2200** | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** |
| Stroke T | 1840 | 1900 | 1960 | 2020 | 2080 | 2140 | 2200 | 2260 | 2320 | 2380 | 2440 |
| N | 16 | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 |
| Module Weight (kg) | 23.69 | 24.32 | 24.95 | 25.57 | 26.2 | 26.83 | 27.46 | 28.08 | 28.71 | 29.34 | 29.96 |

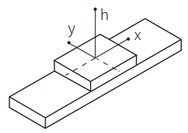
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2740** | **2800** | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** |
| Stroke T | 2500 | 2560 | 2620 | 2680 | 2740 | 2800 | 2860 | 2920 | 2980 | 3040 | 3100 |
| N | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 30.59 | 31.22 | 31.84 | 32.47 | 33.1 | 33.72 | 34.35 | 34.98 | 35.61 | 36.23 | 36.86 |

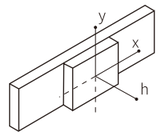
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **3400** | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3160 | 3220 | 3280 | 3340 | 3400 | 3460 | 3520 | 3580 | 3640 | 3700 | 3760 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 37.49 | 38.11 | 38.74 | 39.37 | 39.99 | 40.62 | 41.25 | 41.88 | 42.5 | 43.13 | 43.76 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS105-B120** | **XPLS105-B120-2** | **XPLS105-B120-3** |



## Allowable Load Moment Table

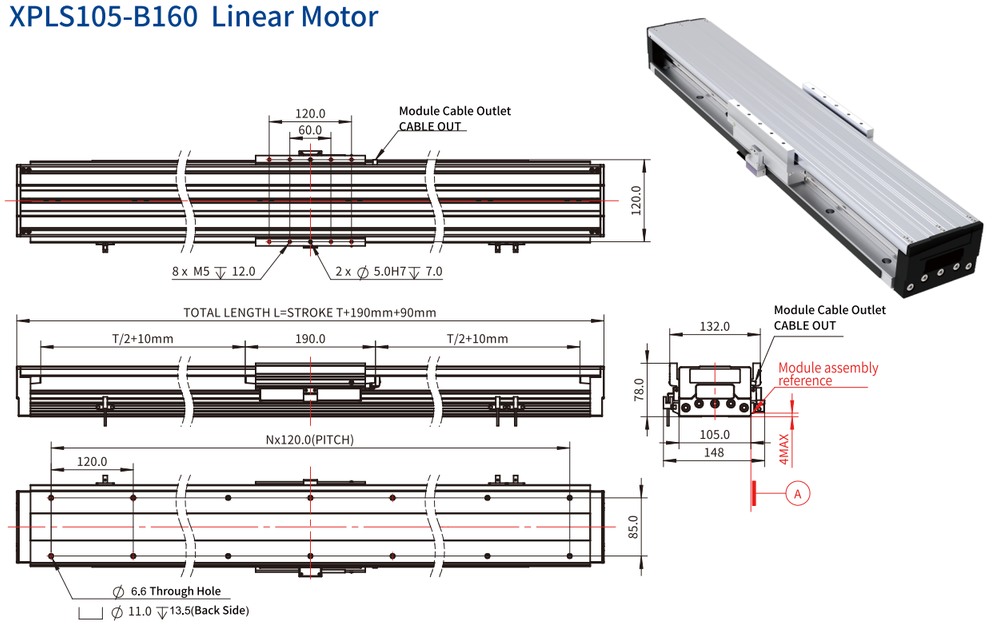



| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 25.0 | 84 | 170 | 312 | 0.5 | 1 | 19.0 | 116 | 438 | 185 |
| | | 17.0 | 126 | 260 | 471 | | | 13.5 | 176 | 651 | 282 |
| | | 12.5 | 183 | 378 | 682 | | | 9.6 | 254 | 936 | 411 |
| | 1.5 | 18.0 | 96 | 159 | 248 | | 1.5 | 12.5 | 156 | 427 | 195 |
| | | 12.5 | 143 | 244 | 378 | | | 8.6 | 234 | 635 | 295 |
| | | 9.0 | 206 | 358 | 552 | | | 6.1 | 337 | 913 | 428 |
| | 2 | 14.0 | 102 | 141 | 199 | | 2 | 8.4 | 198 | 430 | 198 |
| | | 9.8 | 153 | 219 | 308 | | | 5.9 | 294 | 638 | 299 |
| | | 7.0 | 220 | 322 | 454 | | | 4.2 | 422 | 916 | 433 |
| 1 | 1 | 16.0 | 134 | 237 | 319 | 1 | 1 | 15.5 | 147 | 351 | 201 |
| | | 11.5 | 198 | 349 | 474 | | | 11.0 | 220 | 519 | 303 |
| | | 8.1 | 283 | 498 | 680 | | | 7.8 | 317 | 742 | 439 |
| | 1.5 | 11.0 | 161 | 232 | 276 | | 1.5 | 9.9 | 198 | 348 | 206 |
| | | 7.9 | 236 | 341 | 413 | | | 7.0 | 294 | 514 | 310 |
| | | 5.6 | 336 | 487 | 595 | | | 5.0 | 421 | 735 | 448 |
| | 2 | 8.8 | 170 | 211 | 228 | | 2 | 6.8 | 250 | 353 | 208 |
| | | 6.2 | 250 | 310 | 344 | | | 4.7 | 369 | 521 | 312 |
| | | 4.4 | 357 | 443 | 498 | | | 3.4 | 527 | 745 | 451 |
| 1.5 | 1.5 | 8.6 | 215 | 259 | 287 | 1.5 | 1.5 | 8.4 | 240 | 323 | 216 |
| | | 6.0 | 313 | 380 | 426 | | | 5.9 | 354 | 475 | 323 |
| | | 4.3 | 445 | 540 | 611 | | | 4.2 | 505 | 678 | 466 |
| | 2 | 6.6 | 234 | 239 | 247 | | 2 | 5.7 | 304 | 331 | 218 |
| | | 4.6 | 341 | 350 | 369 | | | 4.0 | 445 | 486 | 326 |
| | | 3.3 | 484 | 499 | 532 | | | 2.8 | 634 | 692 | 470 |
| 2 | 2 | 5.4 | 290 | 257 | 258 | 2 | 2 | 4.9 | 352 | 318 | 224 |
| | | 3.7 | 422 | 375 | 384 | | | 3.5 | 515 | 466 | 334 |
| | | 2.7 | 597 | 533 | 551 | | | 2.5 | 732 | 664 | 480 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

# XPLS105-B160 Linear Motor




Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS105** | - | **B160** | - | **E010** | - | **L1000** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 340mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

**XPLS105-B160 Linear Motor Performance Parameter Table**

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS105-B160** | **35.0** | **25** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **60** | **3720** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **140.9** | **427.6** | **2.3** | **8** | | | | |



**XPLS105-B160 Linear Motor Dimensions and Weight Parameter Table**

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **340** | **400** | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** | **940** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 |
| N | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 |
| Module Weight (kg) | 6.17 | 6.79 | 7.42 | 8.05 | 8.67 | 9.3 | 9.93 | 10.56 | 11.18 | 11.81 | 12.44 |

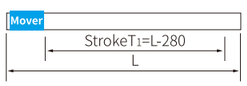
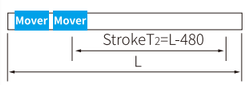
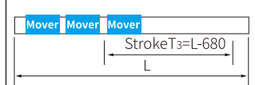
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1000** | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** | **1480** | **1540** |
| Stroke T | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 |
| N | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 |
| Module Weight (kg) | 13.06 | 13.69 | 14.32 | 14.94 | 15.57 | 16.2 | 16.83 | 17.45 | 18.08 | 18.71 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1600** | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** | **2140** |
| Stroke T | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 |
| N | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 |
| Module Weight (kg) | 19.33 | 19.96 | 20.59 | 21.21 | 21.84 | 22.47 | 23.1 | 23.72 | 24.35 | 24.98 |

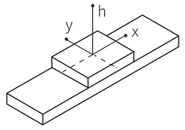
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2200** | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** | **2740** |
| Stroke T | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 | 2460 |
| N | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 |
| Module Weight (kg) | 25.6 | 26.23 | 26.86 | 27.48 | 28.11 | 28.74 | 29.36 | 29.99 | 30.62 | 31.25 |

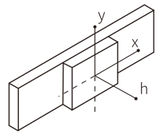
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2800** | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** |
| Stroke T | 2520 | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 |
| N | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 31.87 | 32.5 | 33.13 | 33.75 | 34.38 | 35.01 | 35.63 | 36.26 | 36.89 | 37.52 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **3400** | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3120 | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 | 3660 | 3720 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 38.14 | 38.77 | 39.4 | 40.02 | 40.65 | 41.28 | 41.9 | 42.53 | 43.16 | 43.79 | 44.41 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS105-B160** | **XPLS105-B160-2** | **XPLS105-B160-3** |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 35.0 | 105 | 131 | 425 |
| | | 24.0 | 161 | 203 | 644 |
| | | 17.5 | 235 | 299 | 935 |
| | 1.5 | 26.0 | 118 | 129 | 325 |
| | | 18.0 | 179 | 200 | 499 |
| | | 13.0 | 260 | 295 | 731 |
| | 2 | 21.0 | 115 | 108 | 230 |
| | | 15.0 | 175 | 171 | 362 |
| | | 10.5 | 255 | 254 | 537 |
| 1 | 1 | 23.0 | 173 | 212 | 449 |
| | | 16.0 | 257 | 318 | 667 |
| | | 11.5 | 370 | 460 | 956 |
| | 1.5 | 16.0 | 203 | 217 | 379 |
| | | 11.0 | 300 | 326 | 566 |
| | | 8.0 | 430 | 472 | 815 |
| | 2 | 12.5 | 208 | 193 | 300 |
| | | 8.8 | 308 | 292 | 452 |
| | | 6.3 | 442 | 424 | 654 |
| 1.5 | 1.5 | 12.0 | 272 | 280 | 399 |
| | | 8.6 | 399 | 411 | 590 |
| | | 6.1 | 569 | 586 | 845 |
| | 2 | 9.4 | 289 | 258 334 | |
| | | 6.6 | 425 | 385 | 498 |
| | | 4.7 | 605 | 555 | 716 |
| 2 | 2 | 7.6 | 362 | 300 | 355 |
| | | 5.3 | 528 | 439 | 525 |
| | | 3.8 | 750 | 623 | 752 |

### Side-hanging Installation

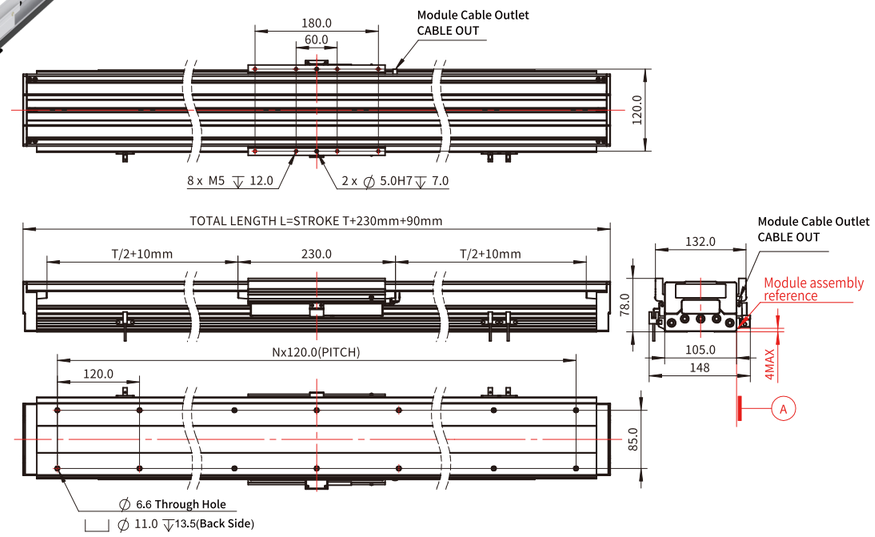
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 25.0 | 168 | 657 | 169 |
| | | 17.5 | 257 | 983 | 260 |
| | | 12.5 | 375 | 1417 | 382 |
| | 1.5 | 17.0 | 215 | 599 | 177 |
| | | 12.0 | 324 | 897 | 271 |
| | | 8.5 | 470 | 1294 | 396 |
| | 2 | 11.5 | 271 | 592 | 183 |
| | | 8.1 | 405 | 884 | 279 |
| | | 5.8 | 585 | 1274 | 407 |
| 1 | 1 | 23.0 | 189 | 463 | 178 |
| | | 16.0 | 286 | 692 | 272 |
| | | 11.5 | 416 | 997 | 398 |
| | 1.5 | 15.0 | 248 | 453 | 188 |
| | | 10.5 | 372 | 672 | 286 |
| | | 7.5 | 536 | 965 | 416 |
| | 2 | 10.0 | 312 | 452 | 193 |
| | | 7.1 | 464 | 670 | 291 |
| | | 5.1 | 667 | 961 | 423 |
| 1.5 | 1.5 | 12.5 | 311 | 437 | 218 |
| | | 8.6 | 461 | 644 | 328 |
| | | 6.1 | 661 | 920 | 475 |
| | 2 | 9.1 | 355 | 400 | 201 |
| | | 6.4 | 525 | 591 | 303 |
| | | 4.5 | 753 | 845 | 439 |
| 2 | 2 | 7.6 | 430 | 405 | 227 |
| | | 5.3 | 634 | 595 | 339 |
| | | 3.8 | 904 | 848 | 489 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS105-B200 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS105** | - | **B200** | - | **E010** | - | **L1000** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 400mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS105-B200 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS105-B200** | **45.0** | **34.0** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **80** | **3680** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **179.8** | **554** | **4.4** | **15.4** | | | | |

## XPLS105-B200 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **400** | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** | **940** |
| Stroke T | 80 | 140 | 200 | 260 | 320 | 380 | 440 | 500 | 560 | 620 |
| N | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 |
| Module Weight (kg) | 7.46 | 8.08 | 8.71 | 9.34 | 9.96 | 10.59 | 11.22 | 11.84 | 12.47 | 13.1 |

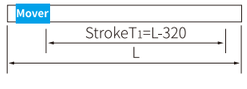
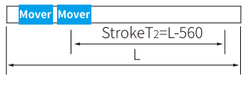
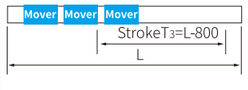
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1000** | **1060** | **1120** | **1180** | **1240** | **1360** | **1300** | **1420** | **1480** | **1540** |
| Stroke T | 680 | 740 | 800 | 860 | 920 | 1040 | 980 | 1100 | 1160 | 1220 |
| N | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 |
| Module Weight (kg) | 13.73 | 14.35 | 14.98 | 15.61 | 16.23 | 17.49 | 16.86 | 18.11 | 18.74 | 19.37 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1600** | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** | **2140** |
| Stroke T | 1280 | 1340 | 1400 | 1460 | 1520 | 1580 | 1640 | 1700 | 1760 | 1820 |
| N | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 |
| Module Weight (kg) | 20 | 20.62 | 21.25 | 21.88 | 22.5 | 23.13 | 23.76 | 24.38 | 25.01 | 25.64 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2200** | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** | **2740** |
| Stroke T | 1880 | 1940 | 2000 | 2060 | 2120 | 2180 | 2240 | 2300 | 2360 | 2420 |
| N | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 |
| Module Weight (kg) | 26.27 | 26.89 | 27.52 | 28.15 | 28.77 | 29.4 | 30.03 | 30.65 | 31.28 | 31.91 |

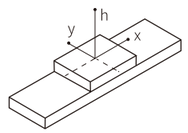
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2800** | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** |
| Stroke T | 2480 | 2540 | 2600 | 2660 | 2720 | 2780 | 2840 | 2900 | 2960 | 3020 |
| N | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 32.53 | 33.16 | 33.79 | 34.42 | 35.04 | 35.67 | 36.3 | 36.92 | 37.55 | 38.18 |

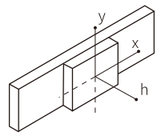
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **3400** | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3080 | 3140 | 3200 | 3260 | 3320 | 3380 | 3440 | 3500 | 3560 | 3620 | 3680 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 38.8 | 39.43 | 40.06 | 40.69 | 41.31 | 41.94 | 42.57 | 43.19 | 43.82 | 44.45 | 45.07 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS105-B200** | **XPLS105-B200-2** | **XPLS105-B200-3** |



## Allowable Load Moment Table




| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 45.0 | 132 | 134 | 541 | 0.5 | 1 | 34.0 | 200 | 786 | 164 |
| | | 31.0 | 201 | 208 | 817 | | | 24.0 | 306 | 1178 | 254 |
| | | 22.0 | 294 | 305 | 1184 | | | 17.0 | 447 | 1698 | 374 |
| | 1.5 | 33.0 | 147 | 135 | 413 | | 1.5 | 23.0 | 250 | 699 | 173 |
| | | 23.0 | 223 | 208 | 632 | | | 16.0 | 378 | 1050 | 266 |
| | | 16.5 | 324 | 306 | 923 | | | 11.5 | 549 | 1516 | 389 |
| | 2 | 27.0 | 143 | 115 | 293 | | 2 | 16.0 | 309 | 676 | 179 |
| | | 19.0 | 218 | 181 | 458 | | | 11.0 | 464 | 1013 | 273 |
| | | 13.5 | 317 | 268 | 677 | | | 8.0 | 671 | 1463 | 399 |
| 1 | 1 | 29.0 | 215 | 218 | 572 | 1 | 1 | 29.0 | 238 | 605 | 189 |
| | | 21.0 | 321 | 327 | 846 | | | 21.0 | 361 | 897 | 288 |
| | | 14.5 | 462 | 472 | 1211 | | | 14.5 | 524 | 1285 | 421 |
| | 1.5 | 20.0 | 253 | 229 | 483 | | 1.5 | 20.0 | 290 | 534 | 190 |
| | | 14.5 | 374 | 344 | 718 | | | 14.5 | 436 | 793 | 289 |
| | | 10.0 | 537 | 496 | 1031 | | | 10.0 | 629 | 1139 | 421 |
| | 2 | 16.0 | 259 | 208 | 383 | | 2 | 14.5 | 349 | 508 | 188 |
| | | 11.5 | 384 | 314 | 574 | | | 10.0 | 521 | 755 | 286 |
| | | 8.0 | 551 | 455 | 829 | | | 7.2 | 750 | 1085 | 416 |
| 1.5 | 1.5 | 15.5 | 339 | 300 | 509 | 1.5 | 1.5 | 15.5 | 392 | 556 | 243 |
| | | 11.0 | 497 | 445 | 749 | | | 11.0 | 581 | 818 | 365 |
| | | 7.8 | 709 | 638 | 1070 | | | 7.8 | 833 | 1167 | 527 |
| | 2 | 12.0 | 359 | 281 | 426 | | 2 | 12.0 | 434 | 492 | 220 |
| | | 8.4 | 527 | 418 | 631 | | | 8.4 | 642 | 726 | 331 |
| | | 6.0 | 751 | 600 | 905 | | | 6.0 | 919 | 1037 | 479 |
| 2 | 2 | 9.7 | 450 | 341 | 453 | 2 | 2 | 9.7 | 548 | 519 | 263 |
| | | 6.8 | 657 | 503 | 667 | | | 6.8 | 805 | 761 | 392 |
| | | 4.9 | 932 | 714 | 953 | | | 4.8 | 1148 | 1083 | 564 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

# XPLS105-B280 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example : | **XPLS105** | - | **B280** | - | **E010** | - | **L1000** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 460mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

**XPLS105-B280 Linear Motor Performance Parameter Table**

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS105-B280** | **60.0** | **50.0** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **60** | **3600** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **257.2** | **806** | **6.3** | **22** | | | | |



**XPLS105-B280 Linear Motor Dimensions and Weight Parameter Table**

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** | **940** | **1000** | **1060** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 |
| N | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 |
| Module Weight (kg) | 9.51 | 10.14 | 10.77 | 11.4 | 12.02 | 12.65 | 13.28 | 13.9 | 14.53 | 15.16 | 15.78 |

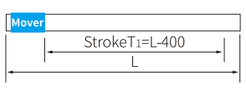
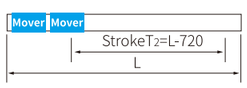
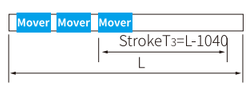
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** | **1480** | **1540** | **1600** | **1660** |
| Stroke T | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 |
| N | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 12 | 13 |
| Module Weight (kg) | 16.41 | 17.04 | 17.67 | 18.29 | 18.92 | 19.55 | 20.17 | 20.8 | 21.43 | 22.05 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** | **2140** | **2200** | **2260** |
| Stroke T | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 |
| N | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 | 18 |
| Module Weight (kg) | 22.68 | 23.31 | 23.94 | 24.56 | 25.19 | 25.82 | 26.44 | 27.07 | 27.7 | 28.32 |

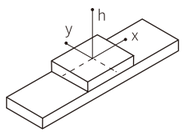
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** | **2740** | **2800** | **2860** | **2920** |
| Stroke T | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 | 2460 | 2520 |
| N | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 | 23 | 24 |
| Module Weight (kg) | 28.95 | 29.58 | 30.21 | 30.83 | 31.46 | 32.09 | 32.71 | 33.34 | 33.97 | 34.59 | 35.22 |

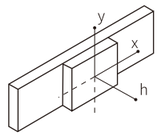
| Parameter | Total Module Length L (mm) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** | **3400** | **3460** |
| Stroke T | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 |
| N | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 | 29 |
| Module Weight (kg) | 35.85 | 36.47 | 37.1 | 37.73 | 38.36 | 38.98 | 39.61 | 40.24 | 40.86 |

| Parameter | Total Module Length L (mm) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3120 | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 |
| N | 29 | 30 | 30 | 31 | 31 | 32 | 32 | 29 | 29 |
| Module Weight (kg) | 41.49 | 42.12 | 42.74 | 43.37 | 44 | 44.63 | 45.25 | 45.88 | 46.51 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS105-B280** | **XPLS105-B280-2** | **XPLS105-B280-3** |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 65.0 | 455 | 125 | 1998 |
| | | 46.0 | 703 | 194 | 3000 |
| | | 33.0 | 1033 | 286 | 4332 |
| | 1.5 | 47.0 | 502 | 135 | 1513 |
| | | 33.0 | 770 | 208 | 2296 |
| | | 24.0 | 1127 | 305 | 3337 |
| | 2 | 39.0 | 481 | 124 | 1058 |
| | | 27.0 | 739 | 192 | 1634 |
| | | 19.5 | 1084 | 283 | 2401 |
| 1 | 1 | 43.0 | 754 | 208 | 2144 |
| | | 30.0 | 1129 | 313 | 3144 |
| | | 21.0 | 1630 | 452 | 4475 |
| | 1.5 | 30.0 | 874 | 235 | 1796 |
| | | 21.0 | 1301 | 351 | 2644 |
| | | 15.0 | 1871 | 506 | 3772 |
| | 2 | 23.0 | 887 | 230 | 1416 |
| | | 16.5 | 1320 | 344 | 2097 |
| | | 11.5 | 1897 | 496 | 3005 |
| 1.5 | 1.5 | 23.0 | 1179 | 317 | 1907 |
| | | 16.0 | 1737 | 468 | 2782 |
| | | 11.5 | 2480 | 670 | 3948 |
| | 2 | 17.5 | 1236 | 321 | 1590 |
| | | 12.0 | 1818 | 474 | 2328 |
| | | 8.7 | 2595 | 678 | 3311 |
| 2 | 2 | 14.0 | 1552 | 402 | 1701 |
| | | 9.9 | 2269 | 590 | 2476 |
| | | 7.1 | 3226 | 841 | 3509 |

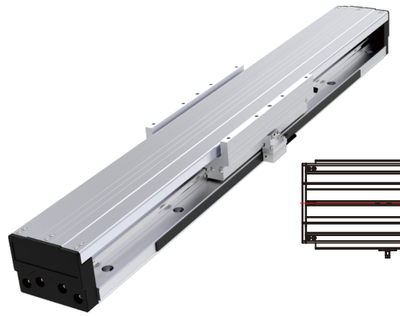
### Side-hanging Installation

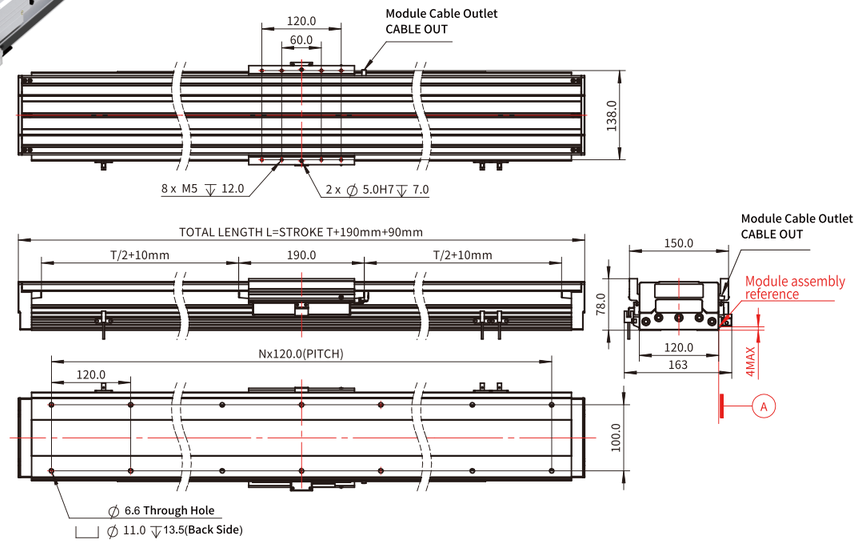
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 50.0 | 683 | 2756 | 152 |
| | | 36.0 | 1054 | 4142 | 238 |
| | | 26.0 | 1548 | 5983 | 353 |
| | 1.5 | 39.0 | 762 | 2166 | 156 |
| | | 27.0 | 1167 | 3282 | 242 |
| | | 19.5 | 1707 | 4766 | 358 |
| | 2 | 29.0 | 867 | 1902 | 159 |
| | | 20.0 | 1319 | 2887 | 248 |
| | | 14.5 | 1921 | 4198 | 365 |
| 1 | 1 | 43.0 | 853 | 2237 | 191 |
| | | 30.0 | 1297 | 3308 | 294 |
| | | 21.0 | 1888 | 4732 | 430 |
| | 1.5 | 30.0 | 1040 | 1962 | 214 |
| | | 21.0 | 1565 | 2909 | 326 |
| | | 15.0 | 2264 | 4169 | 475 |
| | 2 | 23.0 | 1113 | 1650 | 206 |
| | | 16.5 | 1670 | 2458 | 314 |
| | | 11.5 | 2413 | 3533 | 457 |
| 1.5 | 1.5 | 23.0 | 1415 | 2067 | 292 |
| | | 16.0 | 2099 | 3027 | 437 |
| | | 11.5 | 3012 | 4307 | 631 |
| | 2 | 17.5 | 1558 | 1811 | 289 |
| | | 12.0 | 2306 | 2660 | 433 |
| | | 8.7 | 3302 | 3790 | 625 |
| 2 | 2 | 14.0 | 1975 | 1924 | 367 |
| | | 9.8 | 2902 | 2807 | 543 |
| | | 7.0 | 4137 | 3983 | 779 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS120-B160 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS120** | - | **B160** | - | **E010** | - | **L1000** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 340mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS120-B160 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS120-B160** | **50.0** | **33.0** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **60** | **3720** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **193.8** | **588** | **2.3** | **8** | | | | |

## XPLS120-B160 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **340** | **400** | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 |
| N | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| Module Weight (kg) | 7.27 | 7.97 | 8.66 | 9.36 | 10.06 | 10.76 | 11.45 | 12.15 | 12.85 | 13.54 |

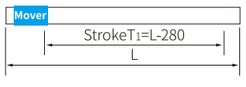
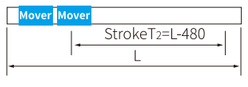
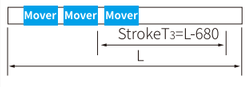
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **940** | **1000** | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** | **1480** |
| Stroke T | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 |
| N | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 |
| Module Weight (kg) | 14.24 | 14.94 | 15.63 | 16.33 | 17.03 | 17.73 | 18.42 | 19.12 | 19.82 | 20.51 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1540** | **1600** | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** |
| Stroke T | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 |
| N | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 |
| Module Weight (kg) | 21.21 | 21.91 | 22.61 | 23.3 | 24 | 24.7 | 25.39 | 26.09 | 26.79 | 27.48 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2140** | **2200** | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** | **2740** |
| Stroke T | 1860 | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 | 2460 |
| N | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 |
| Module Weight (kg) | 28.18 | 28.88 | 29.58 | 30.27 | 30.97 | 31.67 | 32.36 | 33.06 | 33.76 | 34.46 | 35.15 |

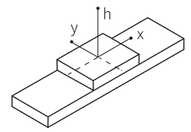
| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **2800** | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** | **3400** |
| Stroke T | 2520 | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 | 3120 |
| N | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Module Weight (kg) | 35.85 | 36.55 | 37.24 | 37.94 | 38.64 | 39.34 | 40.03 | 40.73 | 41.43 | 42.12 | 42.82 |

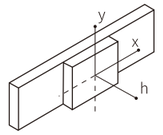
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 | 3660 | 3720 |
| N | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 43.52 | 44.21 | 44.91 | 45.61 | 46.31 | 47 | 47.7 | 48.4 | 49.09 | 49.79 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS120-B160** | **XPLS120-B160-2** | **XPLS120-B160-3** |



## Allowable Load Moment Table



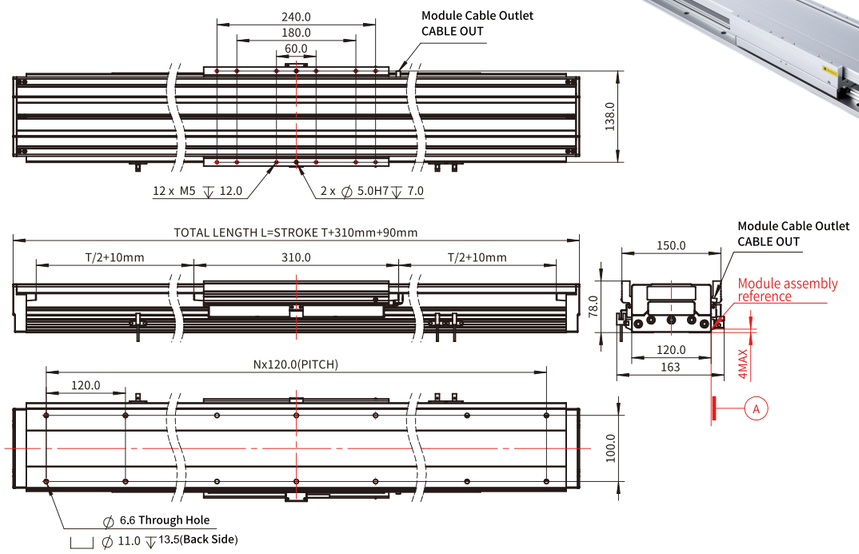




| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 50.0 | 53 | 77 | 234 | 0.5 | 1 | 33.0 | 109 | 440 | 114 |
| | | 35.0 | 87 | 128 | 376 | | | 23.0 | 170 | 675 | 183 |
| | | 25.0 | 132 | 197 | 565 | | | 16.5 | 253 | 988 | 276 |
| | 1.5 | 31.0 | 71 | 87 | 200 | | 1.5 | 21.0 | 148 | 416 | 120 |
| | | 22.0 | 112 | 143 | 323 | | | 14.5 | 227 | 637 | 191 |
| | | 15.5 | 167 | 218 | 487 | | | 10.5 | 334 | 931 | 286 |
| | 2 | 18.0 | 100 | 106 | 199 | | 2 | 13.0 | 201 | 438 | 125 |
| | | 12.5 | 154 | 170 | 319 | | | 9.3 | 304 | 663 | 197 |
| | | 9.1 | 226 | 256 | 478 | | | 6.6 | 442 | 965 | 294 |
| 1 | 1 | 33.0 | 93 | 132 | 267 | 1 | 1 | 30.0 | 123 | 315 | 121 |
| | | 23.0 | 144 | 208 | 409 | | | 21.0 | 191 | 479 | 192 |
| | | 16.5 | 211 | 308 | 598 | | | 15.0 | 282 | 698 | 287 |
| | 1.5 | 23.0 | 104 | 124 | 206 | | 1.5 | 18.5 | 169 | 316 | 127 |
| | | 16.0 | 159 | 197 | 321 | | | 13.0 | 259 | 479 | 199 |
| | | 11.5 | 233 | 293 | 474 | | | 9.4 | 377 | 695 | 296 |
| | 2 | 14.0 | 134 | 137 | 199 | | 2 | 12.0 | 230 | 335 | 132 |
| | | 10.0 | 203 | 215 | 310 | | | 8.2 | 347 | 504 | 206 |
| | | 7.1 | 295 | 318 | 458 | | | 5.9 | 502 | 730 | 304 |
| 1.5 | 1.5 | 17.5 | 142 | 164 | 224 | 1.5 | 1.5 | 17.0 | 192 | 278 | 132 |
| | | 12.5 | 214 | 254 | 343 | | | 12.0 | 291 | 419 | 206 |
| | | 8.8 | 310 | 373 | 501 | | | 8.5 | 422 | 606 | 305 |
| | 2 | 12.0 | 165 | 161 | 201 | | 2 | 11.0 | 253 | 290 | 134 |
| | | 8.3 | 247 | 249 | 309 | | | 7.6 | 382 | 435 | 208 |
| | | 6.0 | 357 | 367 | 452 | | | 5.4 | 551 | 628 | 307 |
| 2 | 2 | 10.5 | 191 | 179 | 200 | 2 | 2 | 9.8 | 281 | 271 | 139 |
| | | 7.3 | 285 | 275 | 306 | | | 6.9 | 424 | 405 | 215 |
| | | 5.2 | 410 | 402 | 446 | | | 4.9 | 610 | 583 | 316 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

# XPLS120-B280 Linear Motor






Note: Profile cover plate with a total module length less than 1700mm
Steel strip cover plate for modules with a total length greater than 1700mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | **XPLS120** | - | **B280** | - | **E010** | - | **L1000** | - | **2** | - | **0.2** | - | **0001** | - | **05 (5 meters)** |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 460mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

**XPLS120-B280 Linear Motor Performance Parameter Table**

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| **XPLS120-B280** | **85.0** | **70.0** | **±5** | **±3** | **1.0~2.0** | **0.5~2** | **60** | **3600** |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | **353.6** | **1108** | **6.3** | **22** | | | | |



**XPLS120-B280 Linear Motor Dimensions and Weight Parameter Table**

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** | **940** | **1000** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 |
| N | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 |
| Module Weight (kg) | 10.47 | 11.17 | 11.86 | 12.56 | 13.26 | 13.95 | 14.65 | 15.35 | 16.05 | 16.74 |

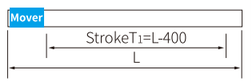
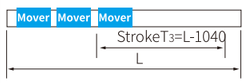
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** | **1480** | **1540** | **1600** |
| Stroke T | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 |
| N | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 12 |
| Module Weight (kg) | 17.44 | 18.14 | 18.83 | 19.53 | 20.23 | 20.92 | 21.62 | 22.32 | 23.02 | 23.71 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** | **2140** | **2200** |
| Stroke T | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 |
| N | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 |
| Module Weight (kg) | 24.41 | 25.11 | 25.8 | 26.5 | 27.2 | 27.9 | 28.59 | 29.29 | 29.99 | 30.68 |

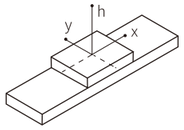
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** | **2740** | **2800** |
| Stroke T | 1860 | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 |
| N | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 |
| Module Weight (kg) | 31.38 | 32.08 | 32.78 | 33.47 | 34.17 | 34.87 | 35.56 | 36.26 | 36.96 | 37.65 |

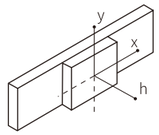
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** | **3400** |
| Stroke T | 2460 | 2520 | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 |
| N | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Module Weight (kg) | 38.35 | 39.05 | 39.75 | 40.44 | 41.14 | 41.84 | 42.53 | 43.23 | 43.93 | 44.63 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3060 | 3120 | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 |
| N | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 45.32 | 46.02 | 46.72 | 47.41 | 48.11 | 48.81 | 49.51 | 50.2 | 50.9 | 51.6 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |   |   |   |
| Model Code | **XPLS120-B280** | **XPLS120-B280-2** | **XPLS120-B280-3** |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 90.0 | 219 | 72 | 1107 |
| | | 60.0 | 365 | 122 | 1760 |
| | | 45.0 | 560 | 187 | 2618 |
| | 1.5 | 65.0 | 223 | 71 | 726 |
| | | 47.0 | 371 | 120 | 1190 |
| | | 33.0 | 569 | 184 | 1804 |
| | 2 | 55.0 | 186 | 55 | 404 |
| | | 39.0 | 318 | 97 | 706 |
| | | 28.0 | 494 | 152 | 1106 |
| 1 | 1 | 60.0 | 391 | 130 | 1294 |
| | | 42.0 | 611 | 205 | 1948 |
| | | 30.0 | 904 | 303 | 2815 |
| | 1.5 | 42.0 | 421 | 135 | 981 |
| | | 30.0 | 654 | 212 | 1493 |
| | | 21.0 | 965 | 314 | 2174 |
| | 2 | 34.0 | 385 | 117 | 670 |
| | | 24.0 | 602 | 186 | 1043 |
| | | 17.0 | 892 | 278 | 1539 |
| 1.5 | 1.5 | 33.0 | 582 | 188 | 1084 |
| | | 23.0 | 884 | 286 | 1618 |
| | | 16.5 | 1287 | 418 | 2327 |
| | 2 | 25.0 | 549 | 169 | 799 |
| | | 18.0 | 837 | 259 | 1207 |
| | | 12.5 | 1221 | 380 | 1751 |
| 2 | 2 | 21.0 | 697 | 214 | 880 |
| | | 14.5 | 1048 | 324 | 1313 |
| | | 10.5 | 1517 | 471 | 1888 |

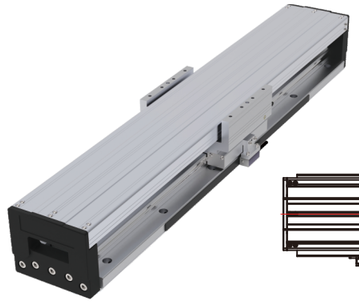
### Side-hanging Installation

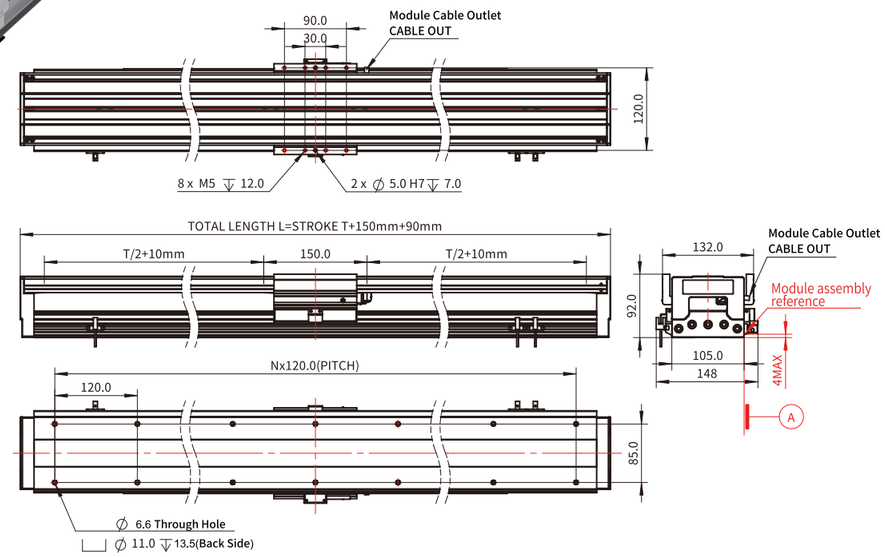
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 65.0 | 438 | 1833 | 102 |
| | | 46.0 | 699 | 2847 | 168 |
| | | 33.0 | 1048 | 4187 | 256 |
| | 1.5 | 47.0 | 522 | 1488 | 104 |
| | | 33.0 | 820 | 2323 | 171 |
| | | 23.0 | 1218 | 3431 | 261 |
| | 2 | 32.0 | 592 | 1371 | 107 |
| | | 23.0 | 964 | 2165 | 174 |
| | | 16.0 | 1459 | 3185 | 264 |
| 1 | 1 | 60.0 | 497 | 1386 | 116 |
| | | 42.0 | 784 | 2111 | 189 |
| | | 30.0 | 1167 | 3071 | 286 |
| | 1.5 | 42.0 | 592 | 1147 | 119 |
| | | 30.0 | 921 | 1758 | 193 |
| | | 21.0 | 1359 | 2569 | 290 |
| | 2 | 32.0 | 601 | 959 | 108 |
| | | 22.0 | 978 | 1480 | 175 |
| | | 16.0 | 1476 | 2172 | 266 |
| 1.5 | 1.5 | 33.0 | 816 | 1237 | 168 |
| | | 23.0 | 1241 | 1854 | 262 |
| | | 16.5 | 1807 | 2673 | 388 |
| | 2 | 25.0 | 829 | 1012 | 147 |
| | | 17.5 | 1303 | 1529 | 232 |
| | | 12.5 | 1909 | 2217 | 345 |
| 2 | 2 | 21.0 | 1072 | 1082 | 189 |
| | | 14.5 | 1636 | 1614 | 291 |
| | | 10.5 | 2368 | 2321 | 428 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS105-C120 Linear Motor






Note: Profile cover plate with a total module length less than 2000mm
Steel strip cover plate for modules with a total length greater than 2000mm

| Model | : | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | XPLS105 | - | C120 | - | E010 | - | L1000 | - | 2 | - | 0.2 | - | 0001 | - | 05 (5 meters) |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 280mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS105-C120 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS105-C120 | 33.0 | 18.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 40 | 3760 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 134.4 | 322 | 2.4 | 8.5 | | | | |

## XPLS105-C120 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **280** | **340** | **400** | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** |
| Stroke T | 40 | 100 | 160 | 220 | 280 | 340 | 400 | 460 | 520 | 580 | 640 |
| N | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| Module Weight (kg) | 5.65 | 6.3 | 6.95 | 7.6 | 8.25 | 8.89 | 9.54 | 10.19 | 10.84 | 11.49 | 12.14 |

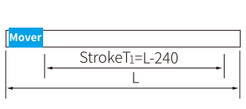
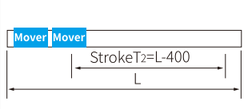
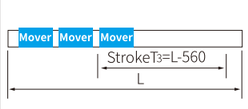
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **940** | **1000** | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** | **1480** |
| Stroke T | 700 | 760 | 820 | 880 | 940 | 1000 | 1060 | 1120 | 1180 | 1240 |
| N | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 |
| Module Weight (kg) | 12.79 | 13.43 | 14.08 | 14.73 | 15.38 | 16.03 | 16.68 | 17.33 | 17.97 | 18.62 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1540** | **1600** | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** |
| Stroke T | 1300 | 1360 | 1420 | 1480 | 1540 | 1600 | 1660 | 1720 | 1780 | 1840 |
| N | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 |
| Module Weight (kg) | 19.27 | 19.92 | 20.57 | 21.22 | 21.87 | 22.52 | 23.16 | 23.81 | 24.46 | 25.11 |

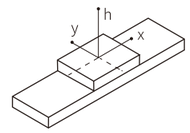
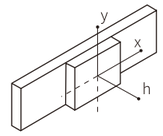
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2140** | **2200** | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** |
| Stroke T | 1900 | 1960 | 2020 | 2080 | 2140 | 2200 | 2260 | 2320 | 2380 | 2440 |
| N | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 |
| Module Weight (kg) | 25.76 | 26.41 | 27.06 | 27.7 | 28.35 | 29 | 29.65 | 30.3 | 30.95 | 31.6 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2740** | **2800** | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** |
| Stroke T | 2500 | 2560 | 2620 | 2680 | 2740 | 2800 | 2860 | 2920 | 2980 | 3040 | 3100 |
| N | 22 | 22 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Module Weight (kg) | 32.24 | 32.89 | 33.54 | 34.19 | 34.84 | 35.49 | 36.14 | 36.78 | 37.43 | 38.08 | 38.73 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **3400** | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3160 | 3220 | 3280 | 3340 | 3400 | 3460 | 3520 | 3580 | 3640 | 3700 | 3760 |
| N | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 | 32 |
| Module Weight (kg) | 39.38 | 40.03 | 40.68 | 41.33 | 41.97 | 42.62 | 43.27 | 43.92 | 44.57 | 45.22 | 45.87 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS105-C120** | **XPLS105-C120-2** | **XPLS105-C120-3** |

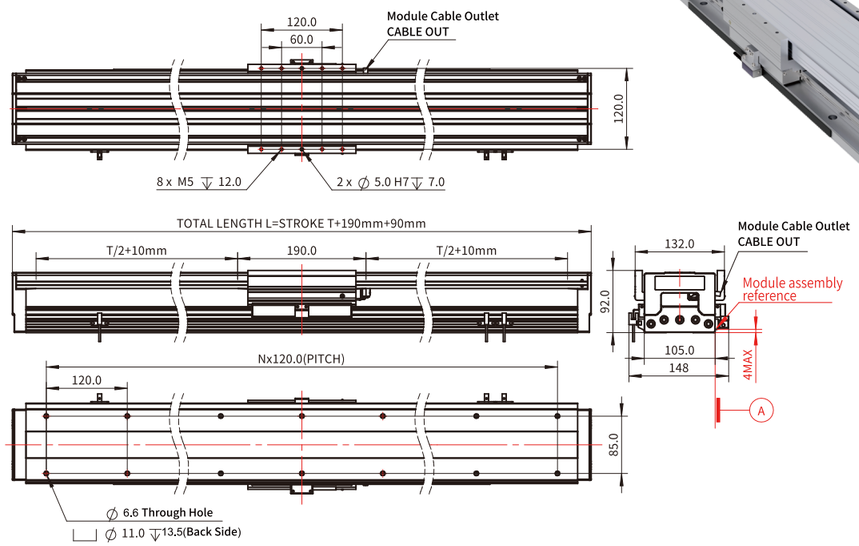


| Allowable Load Moment Table | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  | | | | | |  | | | | |
| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 33.0 | 56 | 107 | 200 | 0.5 | 1 | 18.0 | 121 | 457 | 185 |
| | | 23.0 | 86 | 171 | 315 | | | 12.5 | 184 | 684 | 285 |
| | | 16.5 | 126 | 256 | 468 | | | 8.9 | 267 | 987 | 419 |
| | 1.5 | 19.5 | 80 | 127 | 199 | | 1.5 | 11.0 | 164 | 449 | 194 |
| | | 14.0 | 121 | 200 | 312 | | | 7.8 | 247 | 671 | 298 |
| | | 9.9 | 176 | 298 | 464 | | | 5.6 | 356 | 968 | 437 |
| | 2 | 12.5 | 107 | 141 | 200 | | 2 | 7.4 | 213 | 463 | 201 |
| | | 8.8 | 160 | 221 | 313 | | | 5.2 | 318 | 690 | 307 |
| | | 6.3 | 230 | 328 | 464 | | | 3.7 | 457 | 992 | 448 |
| 1 | 1 | 21.0 | 95 | 167 | 218 | 1 | 1 | 14.5 | 153 | 365 | 200 |
| | | 15.0 | 142 | 251 | 334 | | | 10.0 | 229 | 542 | 305 |
| | | 10.5 | 205 | 362 | 489 | | | 7.3 | 330 | 778 | 446 |
| | 1.5 | 13.5 | 121 | 174 | 199 | | 1.5 | 9.1 | 208 | 365 | 206 |
| | | 9.6 | 180 | 262 | 306 | | | 6.4 | 309 | 541 | 314 |
| | | 6.9 | 259 | 377 | 450 | | | 4.5 | 443 | 777 | 458 |
| | 2 | 9.0 | 156 | 186 | 199 | | 2 | 6.0 | 267 | 376 | 210 |
| | | 6.3 | 231 | 286 | 307 | | | 4.2 | 395 | 558 | 319 |
| | | 4.5 | 330 | 414 | 450 | | | 3.0 | 565 | 799 | 464 |
| 1.5 | 1.5 | 11.0 | 158 | 190 | 201 | 1.5 | 1.5 | 7.8 | 248 | 334 | 213 |
| | | 7.6 | 233 | 283 | 307 | | | 5.4 | 367 | 494 | 323 |
| | | 5.4 | 333 | 406 | 449 | | | 3.9 | 525 | 707 | 469 |
| | 2 | 7.1 | 199 | 205 | 200 | | 2 | 5.2 | 315 | 343 | 214 |
| | | 5.0 | 293 | 303 | 307 | | | 3.6 | 465 | 506 | 324 |
| | | 3.6 | 417 | 434 | 448 | | | 2.6 | 663 | 725 | 471 |
| 2 | 2 | 6.0 | 238 | 211 | 200 | 2 | 2 | 4.5 | 372 | 335 | 224 |
| | | 4.2 | 348 | 312 | 306 | | | 3.1 | 546 | 494 | 338 |
| | | 3.0 | 495 | 446 | 446 | | | 2.2 | 777 | 705 | 489 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

## XPLS105-C160 Linear Motor






Note: Profile cover plate with a total module length less than 2000mm
Steel strip cover plate for modules with a total length greater than 2000mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | XPLS105 | - | C160 | - | E010 | - | L1000 | - | 2 | - | 0.2 | - | 0001 | - | 05 (5 meters) |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 340mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS105-C160 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS105-C160 | 49.0 | 23.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 60 | 3720 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 193.8 | 464.5 | 2.3 | 8 | | | | |



### XPLS105-C160 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 340 | 400 | 460 | 520 | 580 | 640 | 700 | 760 | 820 | 880 |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 |
| N | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| Module Weight (kg) | 7.5 | 8.15 | 8.8 | 9.45 | 10.09 | 10.74 | 11.39 | 12.04 | 12.69 | 13.34 |

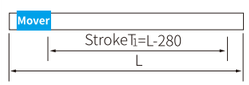
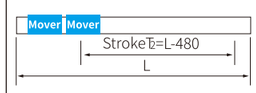
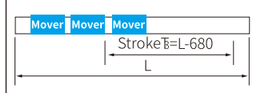
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 940 | 1000 | 1060 | 1120 | 1180 | 1240 | 1300 | 1360 | 1420 | 1480 |
| Stroke T | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 |
| N | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 |
| Module Weight (kg) | 13.99 | 14.63 | 15.28 | 15.93 | 16.58 | 17.23 | 17.88 | 18.53 | 19.17 | 19.82 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1540 | 1600 | 1660 | 1720 | 1780 | 1840 | 1900 | 1960 | 2020 | 2080 |
| Stroke T | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 |
| N | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 |
| Module Weight (kg) | 20.47 | 21.12 | 21.77 | 22.42 | 23.07 | 23.72 | 24.36 | 25.01 | 25.66 | 26.31 |

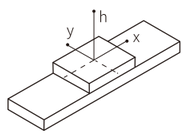
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2140 | 2200 | 2260 | 2320 | 2380 | 2440 | 2500 | 2560 | 2620 | 2680 |
| Stroke T | 1860 | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 |
| N | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 |
| Module Weight (kg) | 26.96 | 27.61 | 28.26 | 28.9 | 29.55 | 30.2 | 30.85 | 31.5 | 32.15 | 32.8 |

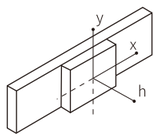
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2740 | 2800 | 2860 | 2920 | 2980 | 3040 | 3100 | 3160 | 3220 | 3280 | 3340 |
| Stroke T | 2460 | 2520 | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 |
| N | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 33.44 | 34.09 | 34.74 | 35.39 | 36.04 | 36.69 | 37.34 | 37.98 | 38.63 | 39.28 | 39.93 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3400 | 3460 | 3520 | 3580 | 3640 | 3700 | 3760 | 3820 | 3880 | 3940 | 4000 |
| Stroke T | 3120 | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 | 3660 | 3720 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 40.58 | 41.23 | 41.88 | 42.53 | 43.17 | 43.82 | 44.47 | 45.12 | 45.77 | 46.42 | 47.07 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | XPLS105-C160 | XPLS105-C160-2 | XPLS105-C160-3 |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 49.0 | 63 | 75 | 254 |
| | | 34.0 | 101 | 124 | 406 |
| | | 24.0 | 151 | 189 | 608 |
| | 1.5 | 33.0 | 76 | 78 | 199 |
| | | 23.0 | 120 | 128 | 325 |
| | | 16.5 | 178 | 195 | 492 |
| | 2 | 21.0 | 105 | 93 | 199 |
| | | 14.5 | 162 | 152 | 323 |
| | | 10.5 | 237 | 229 | 487 |
| 1 | 1 | 30.0 | 116 | 138 | 304 |
| | | 21.0 | 177 | 215 | 464 |
| | | 15.0 | 258 | 317 | 677 |
| | 1.5 | 22.0 | 125 | 127 | 228 |
| | | 15.5 | 191 | 200 | 355 |
| | | 11.0 | 278 | 297 | 524 |
| | 2 | 15.5 | 147 | 127 | 200 |
| | | 11.0 | 222 | 200 | 314 |
| | | 7.8 | 321 | 297 | 466 |
| 1.5 | 1.5 | 17.0 | 173 | 170 | 247 |
| | | 12.0 | 258 | 261 | 379 |
| | | 8.5 | 373 | 383 | 553 |
| | 2 | 13.0 | 182 | 151 | 200 |
| | | 9.0 | 273 | 235 | 310 |
| | | 6.4 | 393 | 347 | 457 |
| 2 | 2 | 10.5 | 227 | 181 | 213 |
| | | 7.4 | 337 | 279 | 327 |
| | | 5.3 | 484 | 409 | 478 |

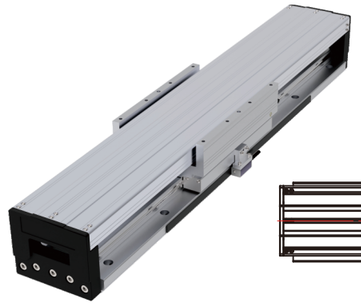
### Side-hanging Installation

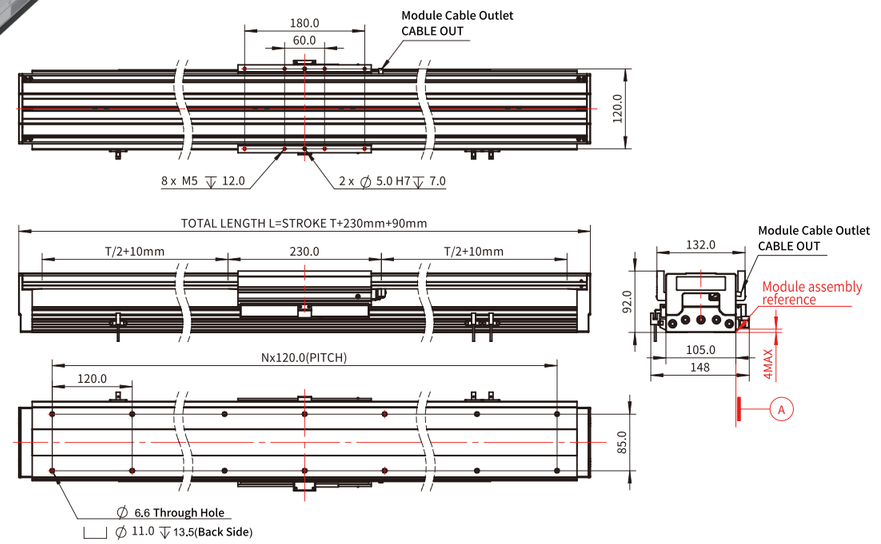
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 23.0 | 179 | 701 | 168 |
| | | 16.0 | 273 | 1055 | 264 |
| | | 11.5 | 400 | 1525 | 391 |
| | 1.5 | 15.0 | 232 | 647 | 178 |
| | | 10.5 | 351 | 973 | 277 |
| | | 7.4 | 510 | 1408 | 408 |
| | 2 | 9.8 | 299 | 651 | 185 |
| | | 6.9 | 448 | 976 | 286 |
| | | 4.9 | 646 | 1409 | 420 |
| 1 | 1 | 21.0 | 199 | 486 | 177 |
| | | 14.5 | 303 | 732 | 275 |
| | | 10.5 | 441 | 1059 | 406 |
| | 1.5 | 13.5 | 262 | 480 | 186 |
| | | 9.4 | 394 | 717 | 287 |
| | | 6.7 | 570 | 1033 | 421 |
| | 2 | 8.7 | 342 | 494 | 194 |
| | | 6.1 | 510 | 736 | 298 |
| | | 4.4 | 734 | 1059 | 437 |
| 1.5 | 1.5 | 12.0 | 297 | 419 | 195 |
| | | 8.4 | 443 | 624 | 299 |
| | | 6.0 | 639 | 896 | 437 |
| | 2 | 7.9 | 384 | 432 | 201 |
| | | 5.5 | 570 | 642 | 307 |
| | | 3.9 | 818 | 922 | 449 |
| 2 | 2 | 7.3 | 420 | 395 | 204 |
| | | 5.1 | 622 | 585 | 311 |
| | | 3.6 | 891 | 839 | 453 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS105-C200 Linear Motor






Note: Profile cover plate with a total module length less than 2000mm
Steel strip cover plate for modules with a total length greater than 2000mm

| Model | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example : | XPLS105 | - | C200 | - | E010 | - | L1000 | - | 2 | - | 0.2 | - | 0001 | - | 05 (5 meters) |
| Selection : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 400mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS105-C200 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS105-C200 | 60 | 30.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 80 | 3680 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 248.2 | 604.5 | 4.4 | 15.4 | | | | |

## XPLS105-C200 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **400** | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** | **940** | **1000** |
| Stroke T | 80 | 140 | 200 | 260 | 320 | 380 | 440 | 500 | 560 | 620 | 680 |
| N | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 |
| Module Weight (kg) | 9.1 | 9.75 | 10.4 | 11.04 | 11.69 | 12.34 | 12.99 | 13.64 | 14.29 | 14.94 | 15.58 |

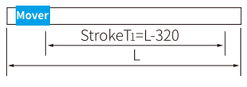
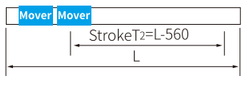
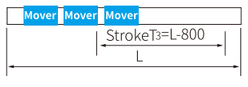
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** | **1480** | **1540** | **1600** |
| Stroke T | 740 | 800 | 860 | 920 | 980 | 1040 | 1100 | 1160 | 1220 | 1280 |
| N | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 12 |
| Module Weight (kg) | 16.23 | 16.88 | 17.53 | 18.18 | 18.83 | 19.48 | 20.12 | 20.77 | 21.42 | 22.07 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** | **2140** | **2200** |
| Stroke T | 1340 | 1400 | 1460 | 1520 | 1580 | 1640 | 1700 | 1760 | 1820 | 1880 |
| N | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 |
| Module Weight (kg) | 22.72 | 23.37 | 24.02 | 24.67 | 25.31 | 25.96 | 26.61 | 27.26 | 27.91 | 28.56 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** | **2740** | **2800** |
| Stroke T | 1940 | 2000 | 2060 | 2120 | 2180 | 2240 | 2300 | 2360 | 2420 | 2480 |
| N | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 |
| Module Weight (kg) | 29.21 | 29.85 | 30.5 | 31.15 | 31.8 | 32.45 | 33.1 | 33.75 | 34.39 | 35.04 |

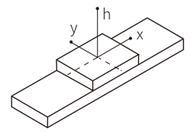
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** | **3400** |
| Stroke T | 2540 | 2600 | 2660 | 2720 | 2780 | 2840 | 2900 | 2960 | 3020 | 3080 |
| N | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Module Weight (kg) | 35.69 | 36.34 | 36.99 | 37.64 | 38.29 | 38.93 | 39.58 | 40.23 | 40.88 | 41.53 |

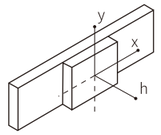
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3140 | 3200 | 3260 | 3320 | 3380 | 3440 | 3500 | 3560 | 3620 | 3680 |
| N | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 42.18 | 42.83 | 43.48 | 44.12 | 44.77 | 45.42 | 46.07 | 46.72 | 47.37 | 48.02 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS105-C200** | **XPLS105-C200-2** | **XPLS105-C200-3** |



## Allowable Load Moment Table



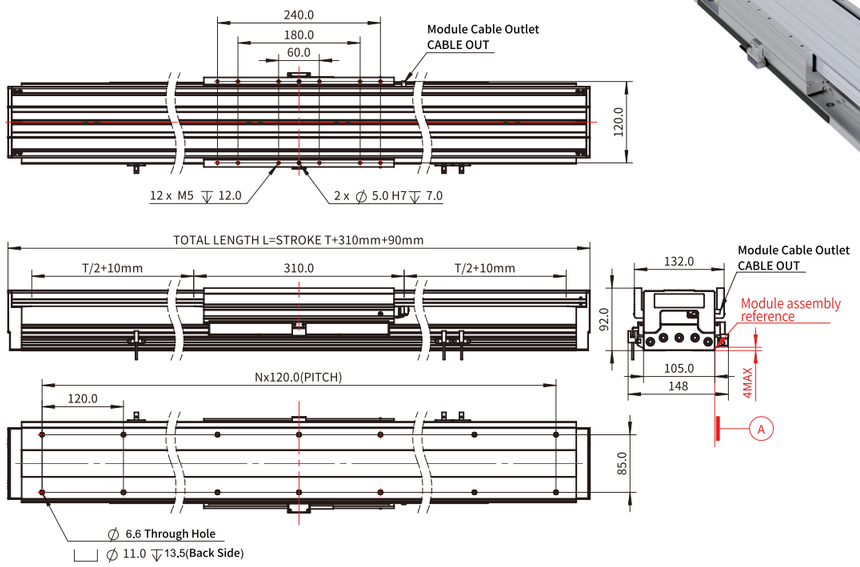




| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 60.0 | 78 | 77 | 325 | 0.5 | 1 | 30.0 | 213 | 843 | 164 |
| | | 44.0 | 124 | 125 | 516 | | | 21.0 | 327 | 1271 | 258 |
| | | 31.0 | 187 | 191 | 768 | | | 15.0 | 479 | 1839 | 383 |
| | 1.5 | 46.0 | 85 | 73 | 232 | | 1.5 | 20.0 | 268 | 751 | 172 |
| | | 32.0 | 136 | 122 | 379 | | | 14.0 | 407 | 1134 | 268 |
| | | 23.0 | 203 | 186 | 574 | | | 10.0 | 592 | 1642 | 397 |
| | 2 | 31.0 | 104 | 78 | 199 | | 2 | 13.5 | 342 | 746 | 179 |
| | | 22.0 | 163 | 129 | 328 | | | 9.5 | 514 | 1121 | 278 |
| | | 15.5 | 242 | 197 | 500 | | | 6.8 | 743 | 1620 | 410 |
| 1 | 1 | 40.0 | 141 | 139 | 381 | 1 | 1 | 29.0 | 230 | 592 | 170 |
| | | 28.0 | 215 | 215 | 578 | | | 20.0 | 352 | 887 | 266 |
| | | 20.0 | 313 | 317 | 840 | | | 14.5 | 513 | 1278 | 394 |
| | 1.5 | 29.0 | 155 | 135 | 294 | | 1.5 | 18.5 | 298 | 550 | 181 |
| | | 20.0 | 236 | 210 | 453 | | | 13.0 | 450 | 824 | 280 |
| | | 14.5 | 343 | 310 | 664 | | | 9.3 | 652 | 1189 | 412 |
| | 2 | 23.0 | 156 | 116 | 219 | | 2 | 12.5 | 381 | 554 | 188 |
| | | 16.0 | 237 | 184 | 345 | | | 8.7 | 570 | 827 | 289 |
| | | 11.5 | 345 | 275 | 512 | | | 6.2 | 822 | 1191 | 425 |
| 1.5 | 1.5 | 22.0 | 212 | 181 | 318 | 1.5 | 1.5 | 17.5 | 325 | 466 | 186 |
| | | 15.5 | 318 | 277 | 481 | | | 12.0 | 489 | 696 | 288 |
| | | 11.0 | 458 | 404 | 699 | | | 8.6 | 706 | 1001 | 423 |
| | 2 | 16.5 | 221 | 163 | 254 | | 2 | 11.5 | 419 | 475 | 194 |
| | | 11.5 | 331 | 251 | 390 | | | 8.0 | 624 | 708 | 297 |
| | | 8.3 | 476 | 369 | 572 | | | 5.7 | 897 | 1017 | 436 |
| 2 | 2 | 13.5 | 280 | 201 | 275 | 2 | 2 | 10.5 | 451 | 428 | 197 |
| | | 9.5 | 415 | 307 | 418 | | | 7.5 | 670 | 636 | 301 |
| | | 6.8 | 595 | 448 | 609 | | | 5.3 | 963 | 914 | 440 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

# XPLS105-C280 Linear Motor






Note: Profile cover plate with a total module length less than 2000mm
Steel strip cover plate for modules with a total length greater than 2000mm

| Model | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example : | XPLS105 | - | C280 | - | E010 | - | L1000 | - | 2 | - | 0.2 | - | 0001 | - | 05 (5 meters) |
| Selection : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 460mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

## XPLS105-C280 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS105-C280 | 85.0 | 47.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 60 | 3600 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 356 | 883 | 6.3 | 22 | | | | |



## XPLS105-C280 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 460 | 520 | 580 | 640 | 700 | 760 | 820 | 880 | 940 | 1000 |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 |
| N | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 |
| Module Weight (kg) | 11.9 | 12.55 | 13.19 | 13.84 | 14.49 | 15.14 | 15.79 | 16.44 | 17.09 | 17.73 |

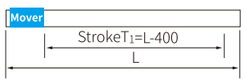
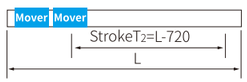
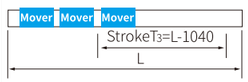
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1060 | 1120 | 1180 | 1240 | 1300 | 1360 | 1420 | 1480 | 1540 | 1600 |
| Stroke T | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 |
| N | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 12 |
| Module Weight (kg) | 18.38 | 19.03 | 19.68 | 20.33 | 20.98 | 21.63 | 22.27 | 22.92 | 23.57 | 24.22 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1660 | 1720 | 1780 | 1840 | 1900 | 1960 | 2020 | 2080 | 2140 | 2200 |
| Stroke T | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 |
| N | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 |
| Module Weight (kg) | 24.87 | 25.52 | 26.17 | 26.82 | 27.46 | 28.11 | 28.76 | 29.41 | 30.06 | 30.71 |

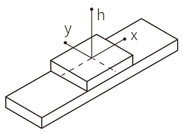
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2260 | 2320 | 2380 | 2440 | 2500 | 2560 | 2620 | 2680 | 2740 | 2800 |
| Stroke T | 1860 | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 |
| N | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 |
| Module Weight (kg) | 31.36 | 32 | 32.65 | 33.3 | 33.95 | 34.6 | 35.25 | 35.9 | 36.54 | 37.19 |

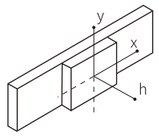
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2860 | 2920 | 2980 | 3040 | 3100 | 3160 | 3220 | 3280 | 3340 | 3400 | 3460 |
| Stroke T | 2460 | 2520 | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 |
| N | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 | 28 |
| Module Weight (kg) | 37.84 | 38.49 | 39.14 | 39.79 | 40.44 | 41.08 | 41.73 | 42.38 | 43.03 | 43.68 | 44.33 |

| Parameter | Total Module Length L (mm) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 3520 | 3580 | 3640 | 3700 | 3760 | 3820 | 3880 | 3940 | 4000 |
| Stroke T | 3120 | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 |
| N | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 | 32 |
| Module Weight (kg) | 44.98 | 45.63 | 46.27 | 46.92 | 47.57 | 48.22 | 48.87 | 49.52 | 50.17 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |   |   |   |
| Model Code | XPLS105-C280 | XPLS105-C280-2 | XPLS105-C280-3 |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 85.0 | 304 | 83 | 1388 |
| | | 55.0 | 488 | 134 | 2142 |
| | | 43.0 | 731 | 202 | 3140 |
| | 1.5 | 60.0 | 337 | 89 | 1024 |
| | | 44.0 | 534 | 142 | 1606 |
| | | 31.0 | 796 | 214 | 2378 |
| | 2 | 50.0 | 318 | 79 | 686 |
| | | 36.0 | 507 | 129 | 1107 |
| | | 26.0 | 759 | 195 | 1668 |
| 1 | 1 | 55.0 | 534 | 147 | 1568 |
| | | 39.0 | 816 | 225 | 2330 |
| | | 28.0 | 1191 | 329 | 3342 |
| | 1.5 | 39.0 | 615 | 164 | 1286 |
| | | 27.0 | 931 | 250 | 1922 |
| | | 19.5 | 1353 | 364 | 2768 |
| | 2 | 30.0 | 622 | 159 | 995 |
| | | 21.0 | 941 | 243 | 1502 |
| | | 15.0 | 1367 | 355 | 2177 |
| 1.5 | 1.5 | 30.0 | 847 | 226 | 1395 |
| | | 21.0 | 1262 | 339 | 2056 |
| | | 15.0 | 1816 | 489 | 2936 |
| | 2 | 23.0 | 883 | 226 | 1146 |
| | | 16.0 | 1314 | 340 | 1698 |
| | | 11.5 | 1889 | 490 | 2435 |
| 2 | 2 | 18.0 | 1128 | 289 | 1250 |
| | | 12.5 | 1664 | 430 | 1837 |
| | | 9.1 | 2380 | 616 | 2619 |

### Side-hanging Installation

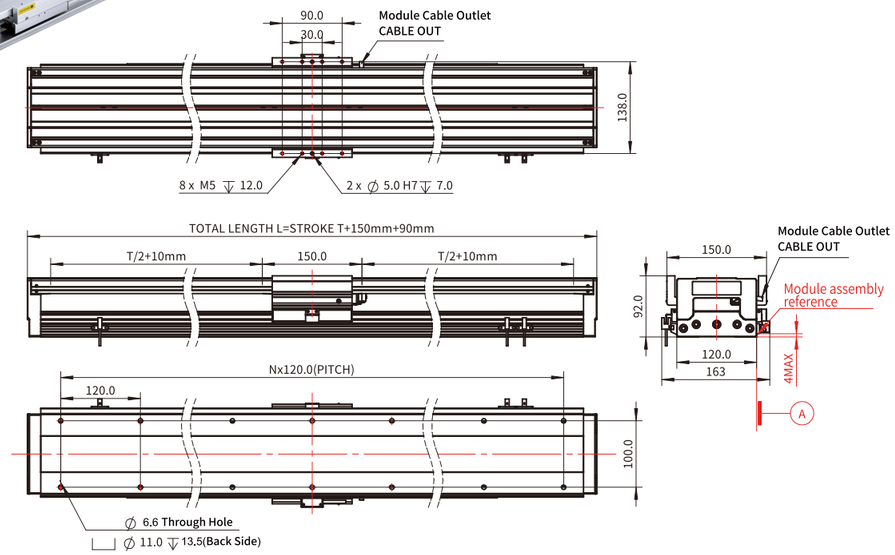
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 47.0 | 718 | 2908 | 153 |
| | | 33.0 | 1112 | 4398 | 242 |
| | | 24.0 | 1638 | 6373 | 363 |
| | 1.5 | 35.0 | 804 | 2287 | 155 |
| | | 25.0 | 1237 | 3485 | 246 |
| | | 17.5 | 1814 | 5078 | 367 |
| | 2 | 26.0 | 920 | 2016 | 159 |
| | | 18.0 | 1404 | 3072 | 250 |
| | | 13.0 | 2049 | 4480 | 373 |
| 1 | 1 | 47.0 | 723 | 1940 | 153 |
| | | 33.0 | 1119 | 2912 | 243 |
| | | 23.0 | 1648 | 4200 | 364 |
| | 1.5 | 35.0 | 815 | 1561 | 157 |
| | | 24.0 | 1252 | 2359 | 248 |
| | | 17.5 | 1835 | 3419 | 370 |
| | 2 | 26.0 | 936 | 1391 | 160 |
| | | 18.0 | 1427 | 2108 | 253 |
| | | 13.0 | 2081 | 3061 | 376 |
| 1.5 | 1.5 | 30.0 | 992 | 1483 | 193 |
| | | 21.0 | 1505 | 2212 | 299 |
| | | 15.0 | 2190 | 3181 | 441 |
| | 2 | 23.0 | 1097 | 1288 | 189 |
| | | 16.0 | 1657 | 1930 | 294 |
| | | 11.5 | 2403 | 2783 | 433 |
| 2 | 2 | 18.0 | 1418 | 1398 | 247 |
| | | 12.5 | 2115 | 2068 | 376 |
| | | 9.0 | 3045 | 2961 | 549 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS120-C120 Linear Motor






Note: Profile cover plate with a total module length less than 2000mm
Steel strip cover plate for modules with a total length greater than 2000mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | XPLS120 | - | C120 | - | E010 | - | L1000 | - | 2 | - | 0.2 | - | 0001 | - | 05 (5 meters) |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 280mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS120-C120 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS120-C120 | 32.0 | 29.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 40 | 3760 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 189 | 452 | 2.4 | 8.5 | | | | |

## XPLS120-C120 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **280** | **340** | **400** | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** |
| Stroke T | 40 | 100 | 160 | 220 | 280 | 340 | 400 | 460 | 520 | 580 | 640 |
| N | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| Module Weight (kg) | 6.35 | 7.05 | 7.75 | 8.44 | 9.14 | 9.84 | 10.54 | 11.23 | 11.93 | 12.63 | 13.32 |

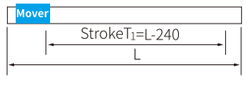
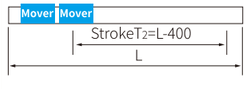
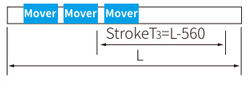
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **940** | **1000** | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** | **1480** |
| Stroke T | 700 | 760 | 820 | 880 | 940 | 1000 | 1060 | 1120 | 1180 | 1240 |
| N | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 |
| Module Weight (kg) | 14.02 | 14.72 | 15.41 | 16.11 | 16.81 | 17.51 | 18.2 | 18.9 | 19.6 | 20.29 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1540** | **1600** | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** |
| Stroke T | 1300 | 1360 | 1420 | 1480 | 1540 | 1600 | 1660 | 1720 | 1780 | 1840 |
| N | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 |
| Module Weight (kg) | 20.99 | 21.69 | 22.39 | 23.08 | 23.78 | 24.48 | 25.17 | 25.87 | 26.57 | 27.26 |

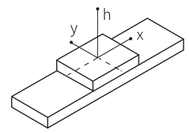
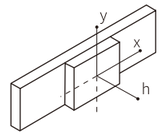
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2140** | **2200** | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** |
| Stroke T | 1900 | 1960 | 2020 | 2080 | 2140 | 2200 | 2260 | 2320 | 2380 | 2440 |
| N | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 |
| Module Weight (kg) | 27.96 | 28.66 | 29.36 | 30.05 | 30.75 | 31.45 | 32.14 | 32.84 | 33.54 | 34.24 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2740** | **2800** | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** |
| Stroke T | 2500 | 2560 | 2620 | 2680 | 2740 | 2800 | 2860 | 2920 | 2980 | 3040 | 3100 |
| N | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 34.93 | 35.63 | 36.33 | 37.02 | 37.72 | 38.42 | 39.12 | 39.81 | 40.51 | 41.21 | 41.9 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **3400** | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3160 | 3220 | 3280 | 3340 | 3400 | 3460 | 3520 | 3580 | 3640 | 3700 | 3760 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 42.6 | 43.3 | 43.99 | 44.69 | 45.39 | 46.09 | 46.78 | 47.48 | 48.18 | 48.87 | 49.57 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS120-C120** | **XPLS120-C120-2** | **XPLS120-C120-3** |

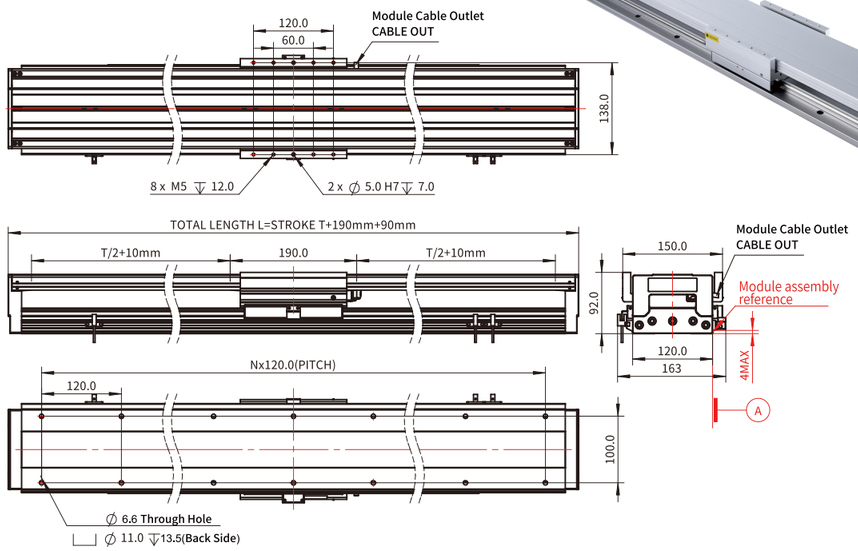


| Allowable Load Moment Table | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
|  | | | | | |  | | | | |
| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 30.0 | 52 | 117 | 199 | 0.5 | 1 | 27.0 | 65 | 256 | 100 |
| | | 21.0 | 81 | 188 | 315 | | | 19.0 | 103 | 398 | 166 |
| | | 15.0 | 120 | 282 | 469 | | | 13.5 | 154 | 587 | 253 |
| | 1.5 | 17.0 | 78 | 140 | 199 | | 1.5 | 16.5 | 93 | 258 | 105 |
| | | 12.0 | 118 | 221 | 314 | | | 11.5 | 144 | 398 | 171 |
| | | 8.5 | 171 | 329 | 467 | | | 8.2 | 213 | 585 | 259 |
| | 2 | 10.0 | 107 | 156 | 200 | | 2 | 10.0 | 129 | 280 | 109 |
| | | 7.1 | 160 | 245 | 313 | | | 7.1 | 197 | 428 | 176 |
| | | 5.1 | 230 | 363 | 465 | | | 5.1 | 288 | 625 | 265 |
| 1 | 1 | 21.0 | 81 | 164 | 200 | 1 | 1 | 23.0 | 83 | 205 | 107 |
| | | 14.5 | 122 | 247 | 309 | | | 16.0 | 129 | 315 | 174 |
| | | 10.5 | 177 | 358 | 454 | | | 11.5 | 189 | 462 | 263 |
| | 1.5 | 12.0 | 114 | 185 | 200 | | 1.5 | 13.5 | 119 | 212 | 111 |
| | | 8.5 | 170 | 284 | 309 | | | 9.4 | 181 | 324 | 179 |
| | | 6.1 | 245 | 409 | 454 | | | 6.7 | 264 | 473 | 269 |
| | 2 | 7.5 | 150 | 197 | 200 | | 2 | 8.5 | 159 | 227 | 113 |
| | | 5.3 | 221 | 304 | 308 | | | 5.9 | 242 | 345 | 181 |
| | | 3.8 | 317 | 447 | 453 | | | 4.2 | 351 | 501 | 271 |
| 1.5 | 1.5 | 9.8 | 144 | 199 | 198 | 1.5 | 1.5 | 11.5 | 140 | 193 | 114 |
| | | 6.9 | 214 | 296 | 304 | | | 8.2 | 213 | 293 | 182 |
| | | 4.9 | 306 | 426 | 445 | | | 5.8 | 309 | 427 | 272 |
| | 2 | 6.2 | 185 | 219 | 197 | | 2 | 7.4 | 185 | 206 | 115 |
| | | 4.3 | 272 | 326 | 303 | | | 5.2 | 282 | 311 | 183 |
| | | 3.1 | 388 | 466 | 444 | | | 3.7 | 407 | 451 | 273 |
| 2 | 2 | 5.2 | 222 | 228 | 201 | 2 | 2 | 6.5 | 211 | 196 | 117 |
| | | 3.6 | 325 | 336 | 307 | | | 4.6 | 321 | 295 | 185 |
| | | 2.6 | 463 | 481 | 449 | | | 3.3 | 464 | 428 | 276 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

## XPLS120-C160 Linear Motor






Note: Profile cover plate with a total module length less than 2000mm
Steel strip cover plate for modules with a total length greater than 2000mm

| Model | | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | XPLS120 | - | C160 | - | E010 | - | L1000 | - | 2 | - | 0.2 | - | 0001 | - | 05 (5 meters) |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 340mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS120-C160 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS120-C160 | 49.0 | 23.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 60 | 3720 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 272.4 | 652.8 | 2.3 | 8 | | | | |



### XPLS120-C160 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 340 | 400 | 460 | 520 | 580 | 640 | 700 | 760 | 820 | 880 |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 |
| N | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| Module Weight (kg) | 8.06 | 8.75 | 9.45 | 10.15 | 10.85 | 11.54 | 12.24 | 12.94 | 13.63 | 14.33 |

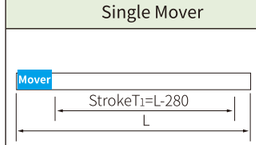
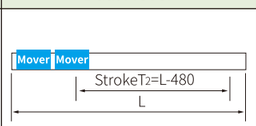
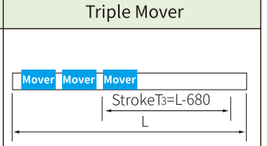
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 940 | 1000 | 1060 | 1120 | 1180 | 1240 | 1300 | 1360 | 1420 | 1480 |
| Stroke T | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 |
| N | 7 | 7 | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 |
| Module Weight (kg) | 15.03 | 15.73 | 16.42 | 17.12 | 17.82 | 18.51 | 19.21 | 19.91 | 20.61 | 21.3 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1540 | 1600 | 1660 | 1720 | 1780 | 1840 | 1900 | 1960 | 2020 | 2080 |
| Stroke T | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 |
| N | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 |
| Module Weight (kg) | 22 | 22.7 | 23.39 | 24.09 | 24.79 | 25.48 | 26.18 | 26.88 | 27.58 | 28.27 |

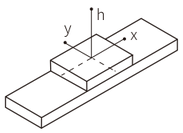
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2140 | 2200 | 2260 | 2320 | 2380 | 2440 | 2500 | 2560 | 2620 | 2680 |
| Stroke T | 1860 | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 |
| N | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 |
| Module Weight (kg) | 28.97 | 29.67 | 30.36 | 31.06 | 31.76 | 32.46 | 33.15 | 33.85 | 34.55 | 35.24 |

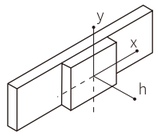
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2740 | 2800 | 2860 | 2920 | 2980 | 3040 | 3100 | 3160 | 3220 | 3280 | 3340 |
| Stroke T | 2460 | 2520 | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 | 3060 |
| N | 22 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 |
| Module Weight (kg) | 35.94 | 36.64 | 37.33 | 38.03 | 38.73 | 39.43 | 40.12 | 40.82 | 41.52 | 42.21 | 42.91 |

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3400 | 3460 | 3520 | 3580 | 3640 | 3700 | 3760 | 3820 | 3880 | 3940 | 4000 |
| Stroke T | 3120 | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 | 3660 | 3720 |
| N | 27 | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 43.61 | 44.31 | 45 | 45.7 | 46.4 | 47.09 | 47.79 | 48.49 | 49.19 | 49.88 | 50.58 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | XPLS120-C160 | XPLS120-C160-2 | XPLS120-C160-3 |

## Allowable Load Moment Table




### Horizontal Installation

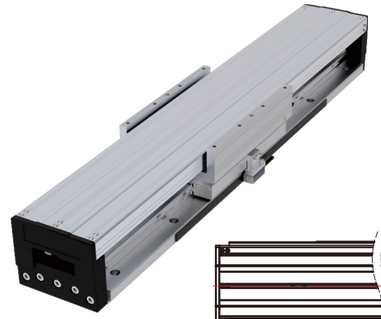
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 49.0 | 45 | 63 | 200 |
| | | 35.0 | 75 | 109 | 334 |
| | | 25.0 | 116 | 171 | 511 |
| | 1.5 | 26.0 | 72 | 85 | 199 |
| | | 18.5 | 114 | 142 | 328 |
| | | 13.0 | 170 | 218 | 498 |
| | 2 | 14.5 | 105 | 105 | 199 |
| | | 10.0 | 161 | 171 | 323 |
| | | 7.2 | 236 | 259 | 488 |
| 1 | 1 | 37.0 | 68 | 94 | 200 |
| | | 26.0 | 109 | 154 | 319 |
| | | 18.5 | 162 | 233 | 477 |
| | 1.5 | 20.0 | 100 | 116 | 199 |
| | | 14.5 | 154 | 186 | 316 |
| | | 10.0 | 226 | 280 | 471 |
| | 2 | 11.5 | 135 | 132 | 198 |
| | | 8.2 | 205 | 210 | 314 |
| | | 5.8 | 298 | 314 | 467 |
| 1.5 | 1.5 | 17.0 | 124 | 139 | 199 |
| | | 12.0 | 190 | 220 | 311 |
| | | 8.5 | 276 | 328 | 461 |
| | 2 | 9.8 | 165 | 155 | 201 |
| | | 6.9 | 247 | 244 | 314 |
| | | 4.9 | 358 | 361 | 464 |
| 2 | 2 | 8.7 | 188 | 170 | 199 |
| | | 6.1 | 281 | 265 | 308 |
| | | 4.4 | 405 | 392 | 454 |

### Side-hanging Installation

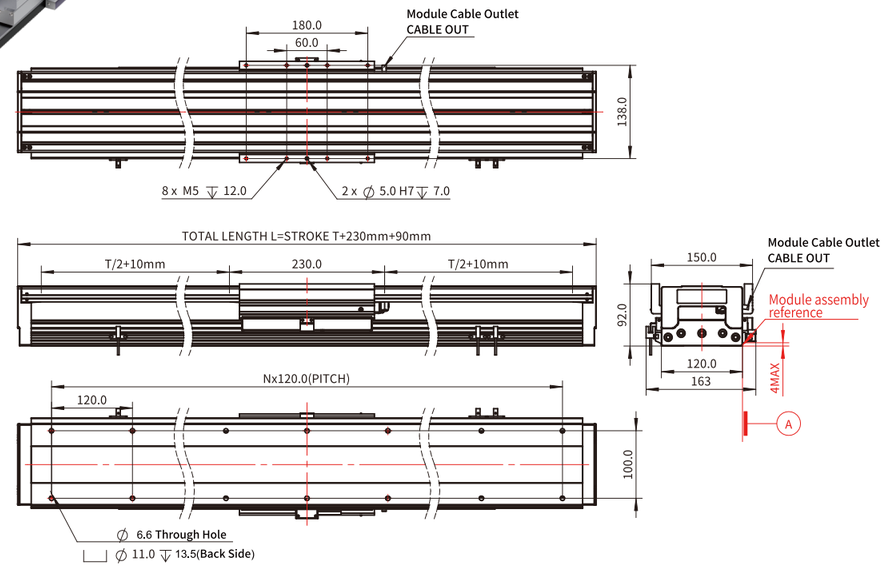
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 33.0 | 99 | 401 | 91 |
| | | 23.0 | 159 | 632 | 154 |
| | | 16.5 | 238 | 937 | 238 |
| | 1.5 | 20.0 | 136 | 391 | 96 |
| | | 14.0 | 218 | 609 | 161 |
| | | 9.9 | 323 | 899 | 246 |
| | 2 | 12.0 | 166 | 382 | 100 |
| | | 8.3 | 274 | 628 | 165 |
| | | 6.0 | 418 | 955 | 251 |
| 1 | 1 | 30.0 | 110 | 286 | 95 |
| | | 21.0 | 175 | 443 | 159 |
| | | 15.0 | 261 | 653 | 245 |
| | 1.5 | 18.0 | 153 | 290 | 100 |
| | | 12.5 | 241 | 448 | 165 |
| | | 9.1 | 358 | 659 | 251 |
| | 2 | 11.0 | 190 | 320 | 104 |
| | | 7.6 | 309 | 488 | 170 |
| | | 5.4 | 467 | 713 | 258 |
| 1.5 | 1.5 | 16.5 | 172 | 253 | 104 |
| | | 11.5 | 267 | 389 | 170 |
| | | 8.3 | 395 | 569 | 259 |
| | 2 | 9.9 | 212 | 275 | 107 |
| | | 7.0 | 341 | 419 | 173 |
| | | 5.0 | 513 | 611 | 262 |
| 2 | 2 | 9.2 | 234 | 252 | 109 |
| | | 6.5 | 374 | 383 | 176 |
| | | 4.6 | 560 | 557 | 265 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.





# XPLS120-C200 Linear Motor




Note: Profile cover plate with a total module length less than 2000mm
Steel strip cover plate for modules with a total length greater than 2000mm

| Model | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example : | XPLS120 | - | C200 | - | E010 | - | L1000 | - | 2 | - | 0.2 | - | 0001 | - | 05 (5 meters) |
| Selection : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 400mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS120-C200 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS120-C200 | 70.0 | 43.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 80 | 3680 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 348.8 | 849.5 | 4.4 | 15.4 | | | | |

## XPLS120-C200 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **400** | **460** | **520** | **580** | **640** | **700** | **760** | **820** | **880** | **940** | **1000** |
| Stroke T | 80 | 140 | 200 | 260 | 320 | 380 | 440 | 500 | 560 | 620 | 680 |
| N | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 |
| Module Weight (kg) | 9.74 | 10.43 | 11.13 | 11.83 | 12.53 | 13.22 | 13.92 | 14.62 | 15.31 | 16.01 | 16.71 |

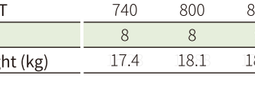
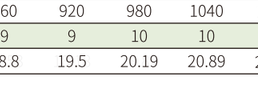
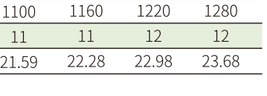
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1060** | **1120** | **1180** | **1240** | **1300** | **1360** | **1420** | **1480** | **1540** | **1600** |
| Stroke T | 740 | 800 | 860 | 920 | 980 | 1040 | 1100 | 1160 | 1220 | 1280 |
| N | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 12 |
| Module Weight (kg) | 17.4 | 18.1 | 18.8 | 19.5 | 20.19 | 20.89 | 21.59 | 22.28 | 22.98 | 23.68 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **1660** | **1720** | **1780** | **1840** | **1900** | **1960** | **2020** | **2080** | **2140** | **2200** |
| Stroke T | 1340 | 1400 | 1460 | 1520 | 1580 | 1640 | 1700 | 1760 | 1820 | 1880 |
| N | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 |
| Module Weight (kg) | 24.38 | 25.07 | 25.77 | 26.47 | 27.16 | 27.86 | 28.56 | 29.25 | 29.95 | 30.65 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2260** | **2320** | **2380** | **2440** | **2500** | **2560** | **2620** | **2680** | **2740** | **2800** |
| Stroke T | 1940 | 2000 | 2060 | 2120 | 2180 | 2240 | 2300 | 2360 | 2420 | 2480 |
| N | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 |
| Module Weight (kg) | 31.35 | 32.04 | 32.74 | 33.44 | 34.13 | 34.83 | 35.53 | 36.23 | 36.92 | 37.62 |

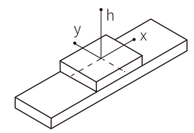
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2860** | **2920** | **2980** | **3040** | **3100** | **3160** | **3220** | **3280** | **3340** | **3400** |
| Stroke T | 2540 | 2600 | 2660 | 2720 | 2780 | 2840 | 2900 | 2960 | 3020 | 3080 |
| N | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Module Weight (kg) | 38.32 | 39.01 | 39.71 | 40.41 | 41.11 | 41.8 | 42.5 | 43.2 | 43.89 | 44.59 |

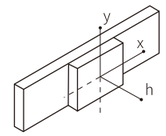
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **3460** | **3520** | **3580** | **3640** | **3700** | **3760** | **3820** | **3880** | **3940** | **4000** |
| Stroke T | 3140 | 3200 | 3260 | 3320 | 3380 | 3440 | 3500 | 3560 | 3620 | 3680 |
| N | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 45.29 | 45.98 | 46.68 | 47.38 | 48.08 | 48.77 | 49.47 | 50.17 | 50.86 | 51.56 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS120-C200** | **XPLS120-C200-2** | **XPLS120-C200-3** |



## Allowable Load Moment Table



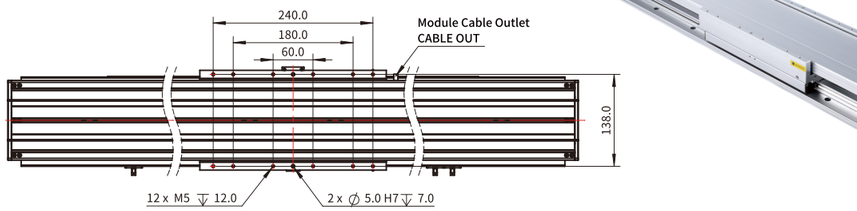



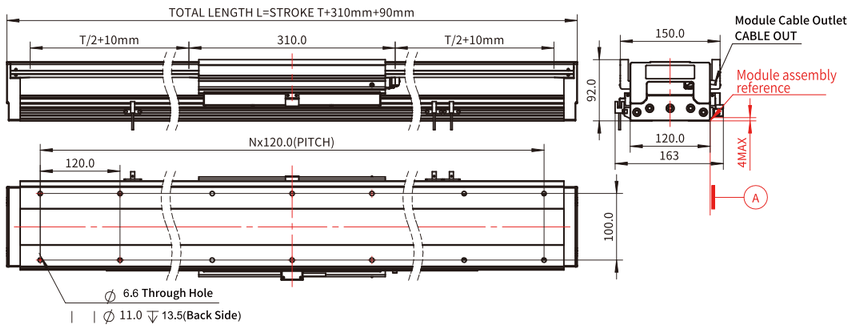

| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 70.0 | 43 | 49 | 199 | 0.5 | 1 | 43.0 | 118 | 484 | 88 |
| | | 50.0 | 75 | 89 | 345 | | | 30.0 | 191 | 765 | 151 |
| | | 37.0 | 118 | 142 | 535 | | | 22.0 | 287 | 1136 | 235 |
| | 1.5 | 39.0 | 70 | 69 | 199 | | 1.5 | 27.0 | 153 | 456 | 93 |
| | | 28.0 | 114 | 119 | 336 | | | 19.0 | 254 | 715 | 156 |
| | | 19.5 | 172 | 185 | 517 | | | 13.5 | 380 | 1058 | 241 |
| | 2 | 21.0 | 104 | 89 | 199 | | 2 | 16.0 | 187 | 433 | 98 |
| | | 15.0 | 162 | 147 | 329 | | | 11.0 | 311 | 716 | 163 |
| | | 10.5 | 240 | 225 | 502 | | | 8.0 | 475 | 1092 | 249 |
| 1 | 1 | 55.0 | 65 | 73 | 200 | 1 | 1 | 41.0 | 127 | 344 | 91 |
| | | 40.0 | 106 | 124 | 325 | | | 29.0 | 204 | 538 | 155 |
| | | 28.0 | 161 | 192 | 491 | | | 20.0 | 306 | 794 | 239 |
| | 1.5 | 31.0 | 96 | 95 | 199 | | 1.5 | 25.0 | 170 | 333 | 97 |
| | | 22.0 | 152 | 156 | 321 | | | 17.5 | 275 | 517 | 161 |
| | | 15.5 | 225 | 236 | 483 | | | 12.5 | 410 | 762 | 247 |
| | 2 | 17.5 | 132 | 111 | 199 | | 2 | 15.0 | 207 | 364 | 101 |
| | | 12.5 | 203 | 180 | 318 | | | 10.5 | 340 | 558 | 167 |
| | | 8.8 | 297 | 271 | 477 | | | 7.5 | 516 | 816 | 254 |
| 1.5 | 1.5 | 26.0 | 120 | 115 | 199 | 1.5 | 1.5 | 23.0 | 187 | 283 | 100 |
| | | 18.5 | 185 | 185 | 316 | | | 16.5 | 297 | 437 | 165 |
| | | 13.0 | 273 | 279 | 470 | | | 11.5 | 441 | 642 | 252 |
| | 2 | 15.0 | 158 | 130 | 199 | | 2 | 14.0 | 224 | 305 | 103 |
| | | 10.5 | 240 | 207 | 314 | | | 9.9 | 365 | 468 | 168 |
| | | 7.6 | 350 | 310 | 468 | | | 7.0 | 553 | 684 | 256 |
| 2 | 2 | 13.5 | 181 | 146 | 199 | 2 | 2 | 13.0 | 244 | 276 | 105 |
| | | 9.4 | 274 | 230 | 312 | | | 9.3 | 394 | 421 | 172 |
| | | 6.7 | 398 | 342 | 461 | | | 6.6 | 594 | 615 | 260 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

## XPLS120-C280 Linear Motor






Note: Profile cover plate with a total module length less than 2000mm
Steel strip cover plate for modules with a total length greater than 2000mm

| Model | Series Code & Base Width Model | - | Slider Model | - | Encoder | - | Total Module Length | - | Mover Quantity | - | Cable Length | - | Special Model | - | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example : | XPLS120 | - | C280 | - | E010 | - | L1000 | - | 2 | - | 0.2 | - | 0001 | - | 05 (5 meters) |
| Selection : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optica Scale 1μm) | | 460mm ~ 4000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS120-C280 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS120-C280 | 120 | 60.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 60 | 3600 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 500 | 1240 | 6.3 | 22 | | | | |



### XPLS120-C280 Linear Motor Dimensions and Weight Parameter Table

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 460 | 520 | 580 | 640 | 700 | 760 | 820 | 880 | 940 | 1000 |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 |
| N | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 |
| Module Weight (kg) | 12.42 | 13.12 | 13.82 | 14.51 | 15.21 | 15.91 | 16.6 | 17.3 | 18 | 18.7 |

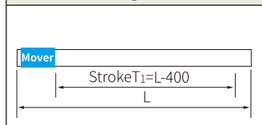
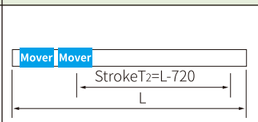
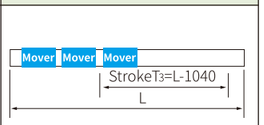
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1060 | 1120 | 1180 | 1240 | 1300 | 1360 | 1420 | 1480 | 1540 | 1600 |
| Stroke T | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 |
| N | 8 | 8 | 9 | 9 | 10 | 10 | 11 | 11 | 12 | 12 |
| Module Weight (kg) | 19.39 | 20.09 | 20.79 | 21.48 | 22.18 | 22.88 | 23.58 | 24.27 | 24.97 | 25.67 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1660 | 1720 | 1780 | 1840 | 1900 | 1960 | 2020 | 2080 | 2140 | 2200 |
| Stroke T | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 |
| N | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 |
| Module Weight (kg) | 26.36 | 27.06 | 27.76 | 28.45 | 29.15 | 29.85 | 30.55 | 31.24 | 31.94 | 32.64 |

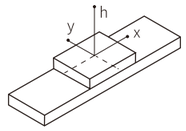
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2260 | 2320 | 2380 | 2440 | 2500 | 2560 | 2620 | 2680 | 2740 | 2800 |
| Stroke T | 1860 | 1920 | 1980 | 2040 | 2100 | 2160 | 2220 | 2280 | 2340 | 2400 |
| N | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 21 | 22 | 22 |
| Module Weight (kg) | 33.33 | 34.03 | 34.73 | 35.43 | 36.12 | 36.82 | 37.52 | 38.21 | 38.91 | 39.61 |

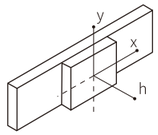
| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2860 | 2920 | 2980 | 3040 | 3100 | 3160 | 3220 | 3280 | 3340 | 3400 |
| Stroke T | 2460 | 2520 | 2580 | 2640 | 2700 | 2760 | 2820 | 2880 | 2940 | 3000 |
| N | 23 | 23 | 24 | 24 | 25 | 25 | 26 | 26 | 27 | 27 |
| Module Weight (kg) | 40.3 | 41 | 41.7 | 42.4 | 43.09 | 43.79 | 44.49 | 45.18 | 45.88 | 46.58 |

| Parameter | Total Module Length L (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 3460 | 3520 | 3580 | 3640 | 3700 | 3760 | 3820 | 3880 | 3940 | 4000 |
| Stroke T | 3060 | 3120 | 3180 | 3240 | 3300 | 3360 | 3420 | 3480 | 3540 | 3600 |
| N | 28 | 28 | 29 | 29 | 30 | 30 | 31 | 31 | 32 | 32 |
| Module Weight (kg) | 47.28 | 47.97 | 48.67 | 49.37 | 50.06 | 50.76 | 51.46 | 52.16 | 52.85 | 53.55 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | XPLS120-C280 | XPLS120-C280-2 | XPLS120-C280-3 |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 120.0 | 103 | 33 | 589 |
| | | 85.0 | 195 | 64 | 1043 |
| | | 60.0 | 328 | 109 | 1670 |
| | 1.5 | 75.0 | 132 | 40 | 438 |
| | | 50.0 | 259 | 82 | 857 |
| | | 37.0 | 393 | 125 | 1292 |
| | 2 | 40.0 | 205 | 59 | 441 |
| | | 28.0 | 345 | 103 | 763 |
| | | 20.0 | 532 | 162 | 1193 |
| 1 | 1 | 80.0 | 200 | 66 | 758 |
| | | 55.0 | 339 | 112 | 1207 |
| | | 42.0 | 523 | 175 | 1796 |
| | 1.5 | 50.0 | 258 | 81 | 649 |
| | | 35.0 | 422 | 135 | 1036 |
| | | 25.0 | 640 | 206 | 1548 |
| | 2 | 40.0 | 204 | 59 | 364 |
| | | 28.0 | 344 | 103 | 620 |
| | | 20.0 | 531 | 162 | 959 |
| 1.5 | 1.5 | 46.0 | 289 | 91 | 598 |
| | | 32.0 | 466 | 149 | 940 |
| | | 23.0 | 702 | 226 | 1391 |
| | 2 | 36.0 | 241 | 70 | 373 |
| | | 25.0 | 397 | 119 | 614 |
| | | 18.0 | 605 | 184 | 934 |
| 2 | 2 | 29.0 | 321 | 95 | 442 |
| | | 21.0 | 512 | 154 | 700 |
| | | 14.5 | 766 | 234 | 1043 |

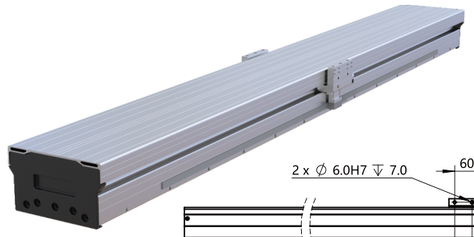
### Side-hanging Installation

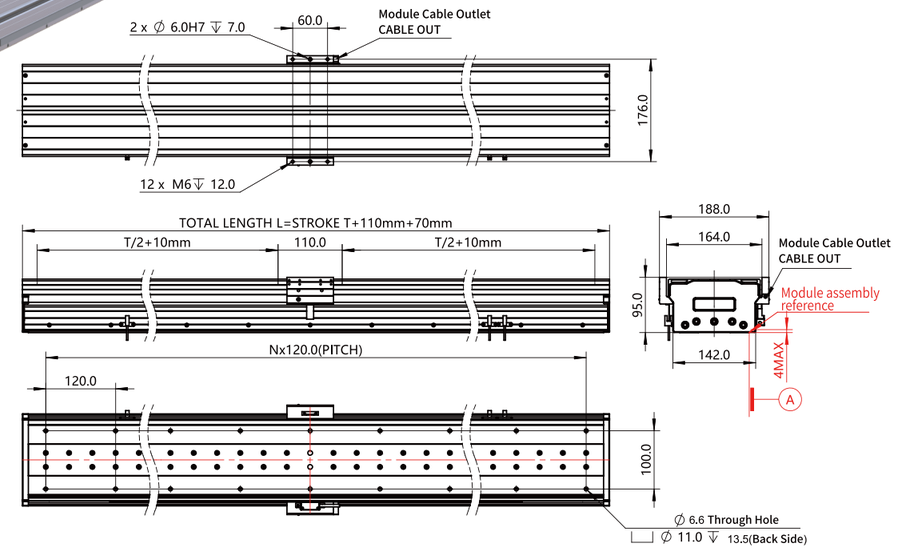
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 60.0 | 410 | 1739 | 81 |
| | | 43.0 | 682 | 2776 | 143 |
| | | 31.0 | 1030 | 4138 | 224 |
| | 1.5 | 41.0 | 437 | 1467 | 83 |
| | | 29.0 | 759 | 2334 | 145 |
| | | 21.0 | 1188 | 3483 | 227 |
| | 2 | 26.0 | 474 | 1115 | 85 |
| | | 18.5 | 816 | 1910 | 147 |
| | | 13.0 | 1272 | 2967 | 230 |
| 1 | 1 | 60.0 | 412 | 1185 | 82 |
| | | 43.0 | 685 | 1871 | 143 |
| | | 31.0 | 1035 | 2771 | 225 |
| | 1.5 | 41.0 | 441 | 1003 | 83 |
| | | 29.0 | 765 | 1590 | 145 |
| | | 21.0 | 1197 | 2364 | 227 |
| | 2 | 26.0 | 481 | 944 | 86 |
| | | 18.0 | 826 | 1574 | 148 |
| | | 13.0 | 1287 | 2328 | 231 |
| 1.5 | 1.5 | 41.0 | 448 | 807 | 84 |
| | | 28.0 | 774 | 1274 | 146 |
| | | 20.0 | 1210 | 1889 | 229 |
| | 2 | 26.0 | 488 | 803 | 87 |
| | | 18.0 | 837 | 1258 | 149 |
| | | 13.0 | 1301 | 1860 | 232 |
| 2 | 2 | 26.0 | 491 | 683 | 87 |
| | | 18.0 | 842 | 1071 | 149 |
| | | 13.0 | 1309 | 1583 | 232 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS120-M-B80 Linear Motor






| Model | | Series Code & Base Width Model | | Slider Model | | Encoder | | Total Module Length | | Mover Quantity | | Cable Length | | Special Model | | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Example | : | XPLS120-M | - | B80 | - | E010 | - | L260 | - | 2 | - | 0.2 | - | 0001 | - | 05 (5 meters) |
| Selection | : | | | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | | 260mm ~ 2000mm | | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | | 0.2m | | Blank: Standard Configuration | | |

### XPLS120-M-B80 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS120-M-B80 | 12.5 | 8.6 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 60 | 3840 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 68.3 | 197.8 | 2.5 | 8.8 | | | | |

## XPLS120-M-B80 Linear Motor Dimensions and Weight Parameter Table

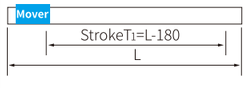
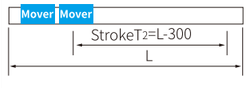
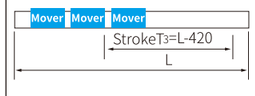
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **260** | **320** | **380** | **440** | **500** | **560** |
| Stroke T | 80 | 140 | 200 | 260 | 320 | 380 |
| N | 1 | 2 | 2 | 3 | 3 | 4 |
| Module Weight (kg) | 6.30 | 7.10 | 7.80 | 8.60 | 9.30 | 10.10 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **620** | **680** | **740** | **800** | **860** | **920** |
| Stroke T | 440 | 500 | 560 | 620 | 680 | 740 |
| N | 4 | 5 | 5 | 6 | 6 | 7 |
| Module Weight (kg) | 10.80 | 11.60 | 12.60 | 13.10 | 13.90 | 14.60 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **980** | **1040** | **1100** | **1160** | **1220** | **1280** |
| Stroke T | 800 | 860 | 920 | 980 | 1040 | 1100 |
| N | 7 | 8 | 8 | 9 | 9 | 10 |
| Module Weight (kg) | 15.40 | 16.10 | 16.90 | 17.60 | 18.40 | 19.10 |

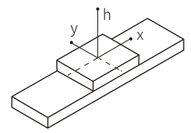
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **1340** | **1400** | **1460** | **1520** | **1580** | **1640** |
| Stroke T | 1160 | 1220 | 1280 | 1340 | 1400 | 1460 |
| N | 10 | 11 | 11 | 12 | 12 | 13 |
| Module Weight (kg) | 19.90 | 20.60 | 21.40 | 22.10 | 22.90 | 23.60 |

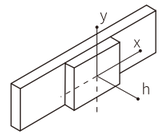
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **1700** | **1760** | **1820** | **1880** | **1940** | **2000** |
| Stroke T | 1520 | 1580 | 1640 | 1700 | 1760 | 1820 |
| N | 13 | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 24.40 | 25.20 | 25.90 | 26.70 | 27.40 | 28.20 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS120-M-B80** | **XPLS120-M-B80-2** | **XPLS120-M-B80-3** |



## Allowable Load Moment Table



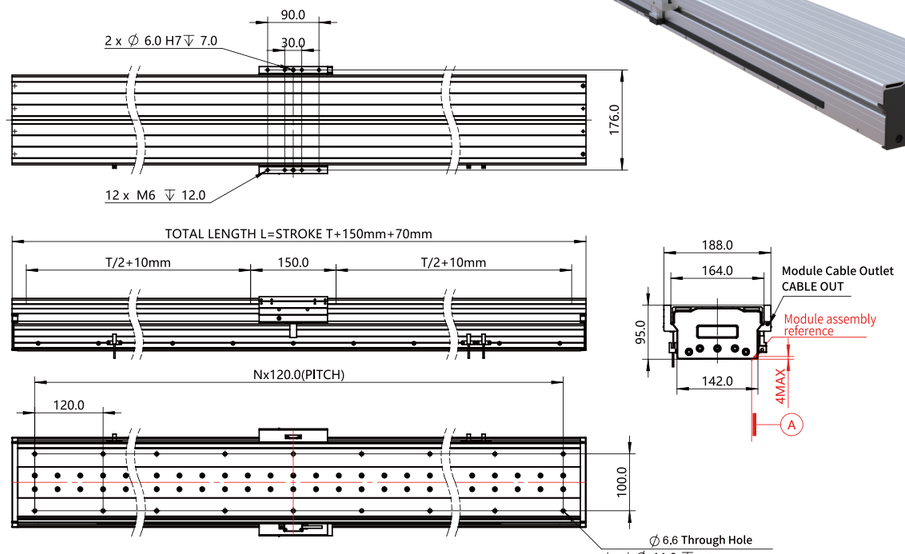




| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 12.5 | 57 | 174 | 200 | 0.5 | 1 | 8.6 | 91 | 334 | 208 |
| | | 8.7 | 85 | 260 | 305 | | | 6.0 | 136 | 494 | 314 |
| | | 6.2 | 123 | 374 | 445 | | | 4.3 | 195 | 708 | 454 |
| | 1.5 | 7.4 | 81 | 194 | 201 | | 1.5 | 5.2 | 128 | 345 | 215 |
| | | 5.2 | 120 | 287 | 306 | | | 3.6 | 190 | 510 | 323 |
| | | 3.7 | 171 | 411 | 446 | | | 2.6 | 271 | 730 | 466 |
| | 2 | 4.8 | 105 | 208 | 199 | | 2 | 3.5 | 162 | 351 | 212 |
| | | 3.4 | 154 | 311 | 304 | | | 2.4 | 239 | 519 | 317 |
| | | 2.4 | 219 | 444 | 443 | | | 1.7 | 342 | 741 | 459 |
| 1 | 1 | 8.2 | 90 | 164 | 192 | 1 | 1 | 6.3 | 129 | 258 | 219 |
| | | 5.8 | 132 | 247 | 290 | | | 4.4 | 190 | 385 | 328 |
| | | 4.1 | 188 | 359 | 421 | | | 3.1 | 272 | 556 | 474 |
| | 1.5 | 5.1 | 121 | 204 | 197 | | 1.5 | 3.8 | 178 | 305 | 222 |
| | | 3.5 | 178 | 300 | 297 | | | 2.7 | 261 | 448 | 332 |
| | | 2.5 | 252 | 428 | 431 | | | 1.9 | 371 | 639 | 478 |
| | 2 | 3.4 | 154 | 215 | 196 | | 2 | 2.5 | 232 | 323 | 228 |
| | | 2.3 | 224 | 315 | 296 | | | 1.8 | 339 | 474 | 340 |
| | | 1.7 | 318 | 450 | 429 | | | 1.3 | 483 | 675 | 488 |
| 1.5 | 1.5 | 4.0 | 157 | 209 | 197 | 1.5 | 1.5 | 3.1 | 223 | 293 | 227 |
| | | 2.8 | 229 | 308 | 296 | | | 2.2 | 325 | 429 | 337 |
| | | 2.0 | 324 | 439 | 428 | | | 1.6 | 461 | 610 | 485 |
| | 2 | 2.6 | 198 | 220 | 198 | | 2 | 2.0 | 292 | 313 | 234 |
| | | 1.8 | 289 | 323 | 297 | | | 1.4 | 426 | 457 | 348 |
| | | 1.3 | 409 | 460 | 430 | | | 1.0 | 603 | 650 | 500 |
| 2 | 2 | 2.1 | 245 | 230 | 205 | 2 | 2 | 1.8 | 335 | 296 | 228 |
| | | 1.5 | 356 | 337 | 307 | | | 1.2 | 487 | 432 | 340 |
| | | 1.1 | 503 | 479 | 442 | | | 0.9 | 689 | 614 | 488 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

## XPLS120-M-C120 Linear Motor






| Model | Series Code & Base Width Model | Slider Model | Encoder | Total Module Length | Mover Quantity | Cable Length | Special Model | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|
| Example : | XPLS120-M | C120 | E010 | L260 | 2 | 0.2 | 0001 | 05 (5 meters) |
| Selection : | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | 260mm ~ 2000mm | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | 0.2m | Blank: Standard Configuration | |

### XPLS120-M-C120 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS120-M-C120 | 32 | 29.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 40 | 3760 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 189 | 452 | 2.4 | 8.5 | | | | |



### XPLS120-M-C120 Linear Motor Dimensions and Weight Parameter Table

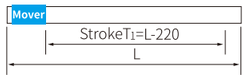
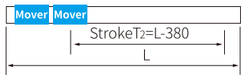
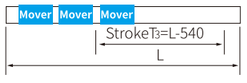
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | 260 | 320 | 380 | 440 | 500 | 560 |
| Stroke T | 40 | 100 | 160 | 220 | 280 | 340 |
| N | 1 | 2 | 2 | 3 | 3 | 4 |
| Module Weight (kg) | 7.00 | 8.00 | 8.80 | 9.50 | 10.30 | 11.00 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | 620 | 680 | 740 | 800 | 860 | 920 |
| Stroke T | 400 | 460 | 520 | 580 | 640 | 700 |
| N | 4 | 5 | 5 | 6 | 6 | 7 |
| Module Weight (kg) | 11.80 | 12.60 | 13.30 | 14.10 | 14.80 | 15.60 |

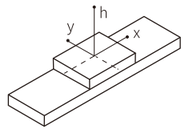
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | 980 | 1040 | 1100 | 1160 | 1220 | 1280 |
| Stroke T | 760 | 820 | 880 | 940 | 1000 | 1060 |
| N | 7 | 8 | 8 | 9 | 9 | 10 |
| Module Weight (kg) | 16.30 | 17.10 | 17.80 | 18.60 | 19.30 | 20.10 |

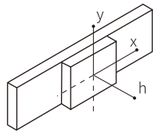
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | 1340 | 1400 | 1460 | 1520 | 1580 | 1640 |
| Stroke T | 1120 | 1180 | 1240 | 1300 | 1360 | 1420 |
| N | 10 | 11 | 11 | 12 | 12 | 13 |
| Module Weight (kg) | 20.80 | 21.60 | 22.30 | 23.10 | 23.90 | 24.60 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | 1700 | 1760 | 1820 | 1880 | 1940 | 2000 |
| Stroke T | 1480 | 1540 | 1600 | 1660 | 1720 | 1780 |
| N | 13 | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 25.40 | 26.10 | 26.90 | 27.60 | 28.40 | 29.10 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |   |   |   |
| Model Code | XPLS120-M-C120 | XPLS120-M-C120-2 | XPLS120-M-C120-3 |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 30.0 | 52 | 117 | 199 |
| | | 21.0 | 81 | 188 | 315 |
| | | 15.0 | 120 | 282 | 469 |
| | 1.5 | 17.0 | 78 | 140 | 199 |
| | | 12.0 | 118 | 221 | 314 |
| | | 8.5 | 171 | 329 | 467 |
| | 2 | 10.0 | 107 | 156 | 200 |
| | | 7.1 | 160 | 245 | 313 |
| | | 5.1 | 230 | 363 | 465 |
| 1 | 1 | 21.0 | 81 | 164 | 200 |
| | | 14.5 | 122 | 247 | 309 |
| | | 10.5 | 177 | 358 | 454 |
| | 1.5 | 12.0 | 114 | 185 | 200 |
| | | 8.5 | 170 | 284 | 309 |
| | | 6.1 | 245 | 409 | 454 |
| | 2 | 7.5 | 150 | 197 | 200 |
| | | 5.3 | 221 | 304 | 308 |
| | | 3.8 | 317 | 447 | 453 |
| 1.5 | 1.5 | 9.8 | 144 | 199 | 198 |
| | | 6.9 | 214 | 296 | 304 |
| | | 4.9 | 306 | 426 | 445 |
| | 2 | 6.2 | 185 | 219 | 197 |
| | | 4.3 | 272 | 326 | 303 |
| | | 3.1 | 388 | 466 | 444 |
| 2 | 2 | 5.2 | 222 | 228 | 201 |
| | | 3.6 | 325 | 336 | 307 |
| | | 2.6 | 463 | 481 | 449 |

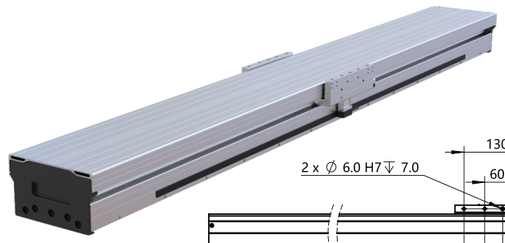
### Side-hanging Installation

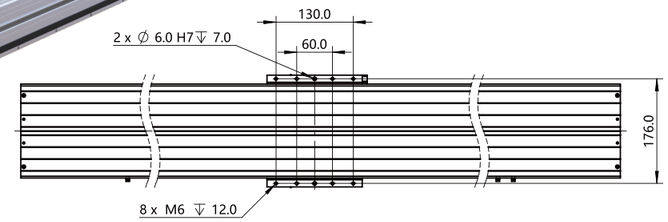
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 27.0 | 65 | 256 | 100 |
| | | 19.0 | 103 | 398 | 166 |
| | | 13.5 | 154 | 587 | 253 |
| | 1.5 | 16.5 | 93 | 258 | 105 |
| | | 11.5 | 144 | 398 | 171 |
| | | 8.2 | 213 | 585 | 259 |
| | 2 | 10.0 | 129 | 280 | 109 |
| | | 7.1 | 197 | 428 | 176 |
| | | 5.1 | 288 | 625 | 265 |
| 1 | 1 | 23.0 | 83 | 205 | 107 |
| | | 16.0 | 129 | 315 | 174 |
| | | 11.5 | 189 | 462 | 263 |
| | 1.5 | 13.5 | 119 | 212 | 111 |
| | | 9.4 | 181 | 324 | 179 |
| | | 6.7 | 264 | 473 | 269 |
| | 2 | 8.5 | 159 | 227 | 113 |
| | | 5.9 | 242 | 345 | 181 |
| | | 4.2 | 351 | 501 | 271 |
| 1.5 | 1.5 | 11.5 | 140 | 193 | 114 |
| | | 8.2 | 213 | 293 | 182 |
| | | 5.8 | 309 | 427 | 272 |
| | 2 | 7.4 | 185 | 206 | 115 |
| | | 5.2 | 282 | 311 | 183 |
| | | 3.7 | 407 | 451 | 273 |
| 2 | 2 | 6.5 | 211 | 196 | 117 |
| | | 4.6 | 321 | 295 | 185 |
| | | 3.3 | 464 | 428 | 276 |

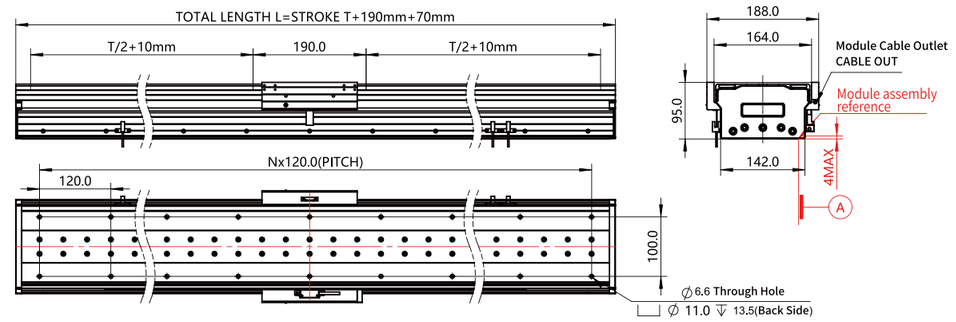
- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS120-M-C160 Linear Motor






| Model | Series Code & Base Width Model | Slider Model | Encoder | Total Module Length | Mover Quantity | Cable Length | Special Model | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|
| Example : | XPLS120-M - | C160 - | E010 - | L340 - | 2 - | 0.2 - | 0001 - | 05 (5 meters) |
| Selection : | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | 340mm ~ 4000mm | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | 0.2m | Blank: Standard Configuration | |

### XPLS120-M-C160 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS120-M-C160 | 49.0 | 33.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 60 | 3720 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 272.4 | 652.8 | 2.3 | 8 | | | | |

## XPLS120-M-C160 Linear Motor Dimensions and Weight Parameter Table

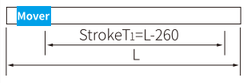
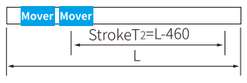
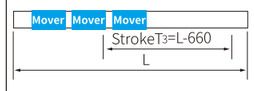
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **320** | **380** | **440** | **500** | **560** | **620** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 |
| N | 2 | 2 | 3 | 3 | 4 | 4 |
| Module Weight (kg) | 9.20 | 10.00 | 10.70 | 11.50 | 12.30 | 13.00 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **680** | **740** | **800** | **860** | **920** | **980** |
| Stroke T | 420 | 480 | 540 | 600 | 660 | 720 |
| N | 5 | 5 | 6 | 6 | 7 | 7 |
| Module Weight (kg) | 13.80 | 14.50 | 15.30 | 16.00 | 16.80 | 17.50 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **1040** | **1100** | **1160** | **1220** | **1280** | **1340** |
| Stroke T | 780 | 840 | 900 | 960 | 1020 | 1080 |
| N | 8 | 8 | 9 | 9 | 10 | 10 |
| Module Weight (kg) | 18.30 | 19.00 | 19.80 | 20.50 | 21.30 | 22.10 |

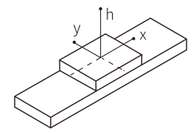
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **1400** | **1460** | **1520** | **1580** | **1640** | **1700** |
| Stroke T | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 |
| N | 11 | 11 | 12 | 12 | 13 | 13 |
| Module Weight (kg) | 22.80 | 23.60 | 24.30 | 25.10 | 25.80 | 26.60 |

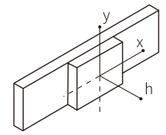
| Parameter | Total Module Length L (mm) | | | | |
|---|---|---|---|---|---|
| | **1760** | **1820** | **1880** | **1940** | **2000** |
| Stroke T | 1500 | 1560 | 1620 | 1680 | 1740 |
| N | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 27.30 | 28.10 | 28.80 | 29.60 | 30.30 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS120-M-C160** | **XPLS120-M-C160-2** | **XPLS120-M-C160-3** |



## Allowable Load Moment Table

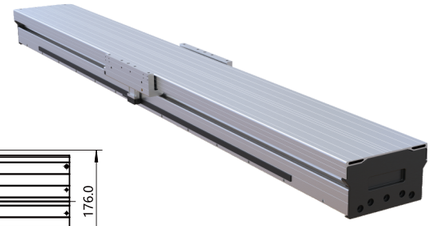



| Horizontal Installation | | | | | | Side-hanging Installation | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) | Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 49.0 | 45 | 63 | 200 | 0.5 | 1 | 33.0 | 99 | 401 | 91 |
| | | 35.0 | 75 | 109 | 334 | | | 23.0 | 159 | 632 | 154 |
| | | 25.0 | 116 | 171 | 511 | | | 16.5 | 238 | 937 | 238 |
| | 1.5 | 26.0 | 72 | 85 | 199 | | 1.5 | 20.0 | 136 | 391 | 96 |
| | | 18.5 | 114 | 142 | 328 | | | 14.0 | 218 | 609 | 161 |
| | | 13.0 | 170 | 218 | 498 | | | 9.9 | 323 | 899 | 246 |
| | 2 | 14.5 | 105 | 105 | 199 | | 2 | 12.0 | 166 | 382 | 100 |
| | | 10.0 | 161 | 171 | 323 | | | 8.3 | 274 | 628 | 165 |
| | | 7.2 | 236 | 259 | 488 | | | 6.0 | 418 | 955 | 251 |
| 1 | 1 | 37.0 | 68 | 94 | 200 | 1 | 1 | 30.0 | 110 | 286 | 95 |
| | | 26.0 | 109 | 154 | 319 | | | 21.0 | 175 | 443 | 159 |
| | | 18.5 | 162 | 233 | 477 | | | 15.0 | 261 | 653 | 245 |
| | 1.5 | 20.0 | 100 | 116 | 199 | | 1.5 | 18.0 | 153 | 290 | 100 |
| | | 14.5 | 154 | 186 | 316 | | | 12.5 | 241 | 448 | 165 |
| | | 10.0 | 226 | 280 | 471 | | | 9.1 | 358 | 659 | 251 |
| | 2 | 11.5 | 135 | 132 | 198 | | 2 | 11.0 | 190 | 320 | 104 |
| | | 8.2 | 205 | 210 | 314 | | | 7.6 | 309 | 488 | 170 |
| | | 5.8 | 298 | 314 | 467 | | | 5.4 | 467 | 713 | 258 |
| 1.5 | 1.5 | 17.0 | 124 | 139 | 199 | 1.5 | 1.5 | 16.5 | 172 | 253 | 104 |
| | | 12.0 | 190 | 220 | 311 | | | 11.5 | 267 | 389 | 170 |
| | | 8.5 | 276 | 328 | 461 | | | 8.3 | 395 | 569 | 259 |
| | 2 | 9.8 | 165 | 155 | 201 | | 2 | 9.9 | 212 | 275 | 107 |
| | | 6.9 | 247 | 244 | 314 | | | 7.0 | 341 | 419 | 173 |
| | | 4.9 | 358 | 361 | 464 | | | 5.0 | 513 | 611 | 262 |
| 2 | 2 | 8.7 | 188 | 170 | 199 | 2 | 2 | 9.2 | 234 | 252 | 109 |
| | | 6.1 | 281 | 265 | 308 | | | 6.5 | 374 | 383 | 176 |
| | | 4.4 | 405 | 392 | 454 | | | 4.6 | 560 | 557 | 265 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

# XPLS120-M-C200 Linear Motor






| Model | Series Code & Base Width Model | Slider Model | Encoder | Total Module Length | Mover Quantity | Cable Length | Special Model | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|
| Example : | XPLS120-M | C200 | E010 | L400 | 2 | 0.2 | 0001 | 05 (5 meters) |
| Selection : | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | 400mm ~ 4000mm | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | 0.2m | Blank: Standard Configuration | |

## XPLS120-M-C200 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS120-M-C200 | 70.0 | 43.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 80 | 3680 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 348.8 | 849.5 | 4.4 | 15.4 | | | | |



## XPLS120-M-C200 Linear Motor Dimensions and Weight Parameter Table

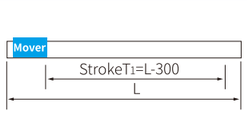
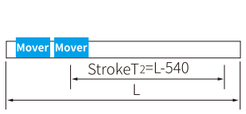
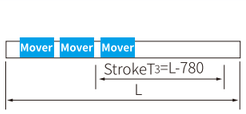
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | 380 | 440 | 500 | 560 | 620 | 680 |
| Stroke T | 80 | 140 | 200 | 260 | 320 | 380 |
| N | 2 | 3 | 3 | 4 | 4 | 5 |
| Module Weight (kg) | 11.10 | 11.80 | 12.60 | 13.30 | 14.10 | 14.80 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | 740 | 800 | 860 | 920 | 980 | 1040 |
| Stroke T | 440 | 500 | 560 | 620 | 680 | 740 |
| N | 5 | 6 | 6 | 7 | 7 | 8 |
| Module Weight (kg) | 15.60 | 16.30 | 17.10 | 17.90 | 18.60 | 19.40 |

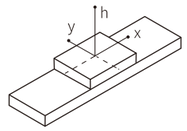
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | 1100 | 1160 | 1220 | 1280 | 1340 | 1400 |
| Stroke T | 800 | 860 | 920 | 980 | 1040 | 1100 |
| N | 8 | 9 | 9 | 10 | 10 | 11 |
| Module Weight (kg) | 20.10 | 20.90 | 21.60 | 22.40 | 23.10 | 23.90 |

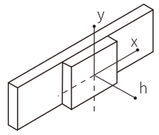
| Parameter | Total Module Length L (mm) | | | | |
|---|---|---|---|---|---|
| | 1460 | 1520 | 1580 | 1640 | 1700 |
| Stroke T | 1160 | 1220 | 1280 | 1340 | 1400 |
| N | 11 | 12 | 12 | 13 | 13 |
| Module Weight (kg) | 24.60 | 25.40 | 26.10 | 26.90 | 27.60 |

| Parameter | Total Module Length L (mm) | | | | |
|---|---|---|---|---|---|
| | 1760 | 1820 | 1880 | 1940 | 2000 |
| Stroke T | 1460 | 1520 | 1580 | 1640 | 1700 |
| N | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 28.40 | 29.20 | 29.90 | 30.70 | 31.40 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | XPLS120-M-C200 | XPLS120-M-C200-2 | XPLS120-M-C200-3 |

## Allowable Load Moment Table




### Horizontal Installation

| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 70.0 | 43 | 49 | 199 |
| | | 50.0 | 75 | 89 | 345 |
| | | 37.0 | 118 | 142 | 535 |
| | 1.5 | 39.0 | 70 | 69 | 199 |
| | | 28.0 | 114 | 119 | 336 |
| | | 19.5 | 172 | 185 | 517 |
| | 2 | 21.0 | 104 | 89 | 199 |
| | | 15.0 | 162 | 147 | 329 |
| | | 10.5 | 240 | 225 | 502 |
| 1 | 1 | 55.0 | 65 | 73 | 200 |
| | | 40.0 | 106 | 124 | 325 |
| | | 28.0 | 161 | 192 | 491 |
| | 1.5 | 31.0 | 96 | 95 | 199 |
| | | 22.0 | 152 | 156 | 321 |
| | | 15.5 | 225 | 236 | 483 |
| | 2 | 17.5 | 132 | 111 | 199 |
| | | 12.5 | 203 | 180 | 318 |
| | | 8.8 | 297 | 271 | 477 |
| 1.5 | 1.5 | 26.0 | 120 | 115 | 199 |
| | | 18.5 | 185 | 185 | 316 |
| | | 13.0 | 273 | 279 | 470 |
| | 2 | 15.0 | 158 | 130 | 199 |
| | | 10.5 | 240 | 207 | 314 |
| | | 7.6 | 350 | 310 | 468 |
| 2 | 2 | 13.5 | 181 | 146 | 199 |
| | | 9.4 | 274 | 230 | 312 |
| | | 6.7 | 398 | 342 | 461 |

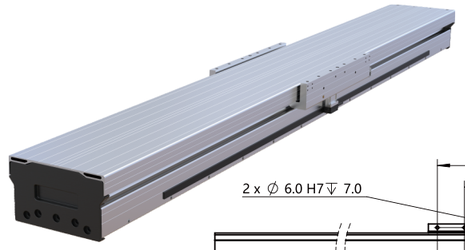
### Side-hanging Installation

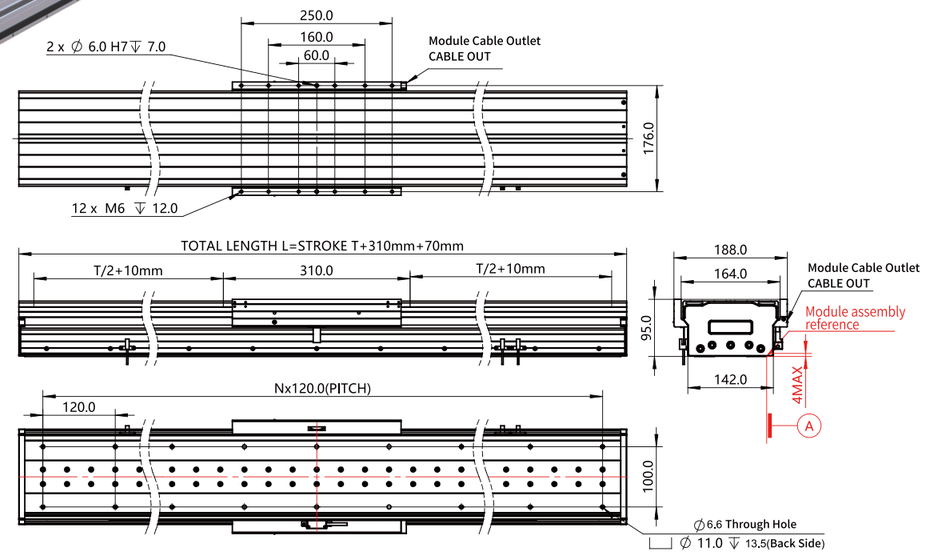
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
|---|---|---|---|---|---|
| 0.5 | 1 | 43.0 | 118 | 484 | 88 |
| | | 30.0 | 191 | 765 | 151 |
| | | 22.0 | 287 | 1136 | 235 |
| | 1.5 | 27.0 | 153 | 456 | 93 |
| | | 19.0 | 254 | 715 | 156 |
| | | 13.5 | 380 | 1058 | 241 |
| | 2 | 16.0 | 187 | 433 | 98 |
| | | 11.0 | 311 | 716 | 163 |
| | | 8.0 | 475 | 1092 | 249 |
| 1 | 1 | 41.0 | 127 | 344 | 91 |
| | | 29.0 | 204 | 538 | 155 |
| | | 20.0 | 306 | 794 | 239 |
| | 1.5 | 25.0 | 170 | 333 | 97 |
| | | 17.5 | 275 | 517 | 161 |
| | | 12.5 | 410 | 762 | 247 |
| | 2 | 15.0 | 207 | 364 | 101 |
| | | 10.5 | 340 | 558 | 167 |
| | | 7.5 | 516 | 816 | 254 |
| 1.5 | 1.5 | 23.0 | 187 | 283 | 100 |
| | | 16.5 | 297 | 437 | 165 |
| | | 11.5 | 441 | 642 | 252 |
| | 2 | 14.0 | 224 | 305 | 103 |
| | | 9.9 | 365 | 468 | 168 |
| | | 7.0 | 553 | 684 | 256 |
| 2 | 2 | 13.0 | 244 | 276 | 105 |
| | | 9.3 | 394 | 421 | 172 |
| | | 6.6 | 594 | 615 | 260 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.



# XPLS120-M-C280 Linear Motor






| Model | Series Code & Base Width Model | Slider Model | Encoder | Total Module Length | Mover Quantity | Cable Length | Special Model | ExtensionCable Length |
|---|---|---|---|---|---|---|---|---|
| Example : | XPLS120-M - | C280 - | E010 - | L440 - | 2 - | 0.2 - | 0001 - | 05 (5 meters) |
| Selection : | | | AE010 (Optical Incremental 1μm)<br>EA010 (Absolute Magnetic Scale 1μm)<br>AEA010 (Absolute Optical Scale 1μm) | 440mm ~ 2000mm | Blank: Single Mover<br>2: Dual Mover<br>3: Triple Mover<br>4: Quad Mover | 0.2m | Blank: Standard Configuration | |

### XPLS120-M-C280 Linear Motor Performance Parameter Table

| Module Model | Rated Load (kg) | | Repeat Positioning Accuracy | | Speed (m/s) | Acceleration (g) | Stroke (mm) | |
|---|---|---|---|---|---|---|---|---|
| | Horizontal | Side-hanging | Magnetic Scale | Optical Scale | | | Min. | Max. |
| XPLS120-M-C280 | 120.0 | 60.0 | ±5 | ±3 | 1.0~2.0 | 0.5~2 | 60 | 3600 |
| | Continuous Thrust | Peak Thrust (N) | Continuous Current | Peak Current | Straightness: ±10μm/300mm, the side of the base is the module installation reference.All accuracies are based on inspection using a marble mounting surface with a flatness of 5μm. | | | |
| | 500 | 1240 | 6.3 | 22 | | | | |

## XPLS120-M-C280 Linear Motor Dimensions and Weight Parameter Table

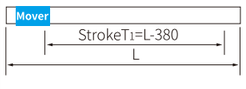
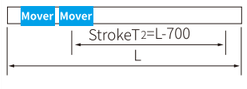
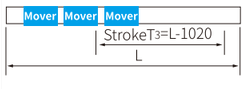
| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **440** | **500** | **560** | **620** | **680** | **740** |
| Stroke T | 60 | 120 | 180 | 240 | 300 | 360 |
| N | 3 | 3 | 4 | 4 | 5 | 5 |
| Module Weight (kg) | 14.10 | 14.90 | 15.60 | 16.40 | 17.10 | 17.90 |

| Parameter | Total Module Length L (mm) | | | | | |
|---|---|---|---|---|---|---|
| | **800** | **860** | **920** | **980** | **1040** | **1100** |
| Stroke T | 420 | 480 | 540 | 600 | 660 | 720 |
| N | 6 | 6 | 7 | 7 | 8 | 8 |
| Module Weight (kg) | 18.60 | 19.40 | 20.10 | 20.90 | 21.90 | 22.40 |

| Parameter | Total Module Length L (mm) | | | | |
|---|---|---|---|---|---|
| | **1160** | **1220** | **1280** | **1340** | **1400** |
| Stroke T | 780 | 840 | 900 | 960 | 1020 |
| N | 9 | 9 | 10 | 10 | 11 |
| Module Weight (kg) | 23.10 | 23.90 | 24.70 | 25.40 | 26.20 |

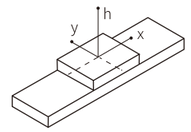
| Parameter | Total Module Length L (mm) | | | | |
|---|---|---|---|---|---|
| | **1460** | **1520** | **1580** | **1640** | **1700** |
| Stroke T | 1080 | 1140 | 1200 | 1260 | 1320 |
| N | 11 | 12 | 12 | 13 | 13 |
| Module Weight (kg) | 26.90 | 27.70 | 28.40 | 29.20 | 29.90 |

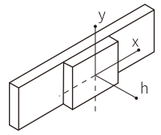
| Parameter | Total Module Length L (mm) | | | | |
|---|---|---|---|---|---|
| | **1760** | **1820** | **1880** | **1940** | **2000** |
| Stroke T | 1380 | 1440 | 1500 | 1560 | 1620 |
| N | 14 | 14 | 15 | 15 | 16 |
| Module Weight (kg) | 30.70 | 31.40 | 32.20 | 32.90 | 33.70 |

| Multi-Mover Stroke Schematic Diagram | | | |
|---|---|---|---|
| | Single Mover | Dual Mover | Triple Mover |
| Stroke Description |  |  |  |
| Model Code | **XPLS120-M-C280** | **XPLS120-M-C280-2** | **XPLS120-M-C280-3** |



## Allowable Load Moment Table




| Horizontal Installation | | | | | |
|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 120.0 | 103 | 33 | 589 |
| | | 85.0 | 195 | 64 | 1043 |
| | | 60.0 | 328 | 109 | 1670 |
| | 1.5 | 75.0 | 132 | 40 | 438 |
| | | 50.0 | 259 | 82 | 857 |
| | | 37.0 | 393 | 125 | 1292 |
| | 2 | 40.0 | 205 | 59 | 441 |
| | | 28.0 | 345 | 103 | 763 |
| | | 20.0 | 532 | 162 | 1193 |
| 1 | 1 | 80.0 | 200 | 66 | 758 |
| | | 55.0 | 339 | 112 | 1207 |
| | | 42.0 | 523 | 175 | 1796 |
| | 1.5 | 50.0 | 258 | 81 | 649 |
| | | 35.0 | 422 | 135 | 1036 |
| | | 25.0 | 640 | 206 | 1548 |
| | 2 | 40.0 | 204 | 59 | 364 |
| | | 28.0 | 344 | 103 | 620 |
| | | 20.0 | 531 | 162 | 959 |
| 1.5 | 1.5 | 46.0 | 289 | 91 | 598 |
| | | 32.0 | 466 | 149 | 940 |
| | | 23.0 | 702 | 226 | 1391 |
| | 2 | 36.0 | 241 | 70 | 373 |
| | | 25.0 | 397 | 119 | 614 |
| | | 18.0 | 605 | 184 | 934 |
| 2 | 2 | 29.0 | 321 | 95 | 442 |
| | | 21.0 | 512 | 154 | 700 |
| | | 14.5 | 766 | 234 | 1043 |

| Side-hanging Installation | | | | | |
|---|---|---|---|---|---|
| Acceleration (g) | Speed (m/s) | Load (kg) | X (mm) | Y (mm) | H (mm) |
| 0.5 | 1 | 60.0 | 410 | 1739 | 81 |
| | | 43.0 | 682 | 2776 | 143 |
| | | 31.0 | 1030 | 4138 | 224 |
| | 1.5 | 41.0 | 437 | 1467 | 83 |
| | | 29.0 | 759 | 2334 | 145 |
| | | 21.0 | 1188 | 3483 | 227 |
| | 2 | 26.0 | 474 | 1115 | 85 |
| | | 18.5 | 816 | 1910 | 147 |
| | | 13.0 | 1272 | 2967 | 230 |
| 1 | 1 | 60.0 | 412 | 1185 | 82 |
| | | 43.0 | 685 | 1871 | 143 |
| | | 31.0 | 1035 | 2771 | 225 |
| | 1.5 | 41.0 | 441 | 1003 | 83 |
| | | 29.0 | 765 | 1590 | 145 |
| | | 21.0 | 1197 | 2364 | 227 |
| | 2 | 26.0 | 481 | 944 | 86 |
| | | 18.0 | 826 | 1574 | 148 |
| | | 13.0 | 1287 | 2328 | 231 |
| 1.5 | 1.5 | 41.0 | 448 | 807 | 84 |
| | | 28.0 | 774 | 1274 | 146 |
| | | 20.0 | 1210 | 1889 | 229 |
| | 2 | 26.0 | 488 | 803 | 87 |
| | | 18.0 | 837 | 1258 | 149 |
| | | 13.0 | 1301 | 1860 | 232 |
| 2 | 2 | 26.0 | 491 | 683 | 87 |
| | | 18.0 | 842 | 1071 | 149 |
| | | 13.0 | 1309 | 1583 | 232 |

- If speed > 2 m/s or acceleration > 2 g, please contact the manufacturer for assistance with selection.
- The data in the table represents the maximum allowable offset of the load's center of gravity from the center in different directions. Refer to the selection instructions when the center of gravity has offsets in all directions.
- Under normal use meeting product requirements, the guaranteed service life is 50,000 kilometers.
- This drawing shows current data and will be continuously updated based on the latest test results.
- The data in the table is calculated based on a 1000 mm stroke and a dwell time of 0.2 s.

## Module Model Definition

XPLS119 - B15 - W060 - E010 - TL60 - 1 - 0.2 - 5 - 001

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

① Series Model / Base Width Code

| |
|---|
| XPLS119 |
| XPLS120 |
| XPLS168 |
| XPLS188 |

② Motor Series

| |
|---|
| B15 |
| B2 |
| B3 |
| C15 |
| C2 |
| C3 |

③ Mover Model

| |
|---|
| W060 |
| W090 |

④ Encoder

| |
|---|
| AE010：Incremental Optical, 1 μm |
| EA010：Absolute Magnetic, 1 μm |
| AEA010：Absolute Optical, 1 μm |
| E010：Incremental, 1 μm |

⑤ Module Total Length

| |
|---|
| TL60 |
| TL120 |

⑥ Number of Movers

| |
|---|
| 1 |
| 2 |
| 3 |

⑦ Cable Length

| |
|---|
| 0.2m |
| 3m |
| 5m |

⑧ Extension Cable Length

| |
|---|
| 5m |

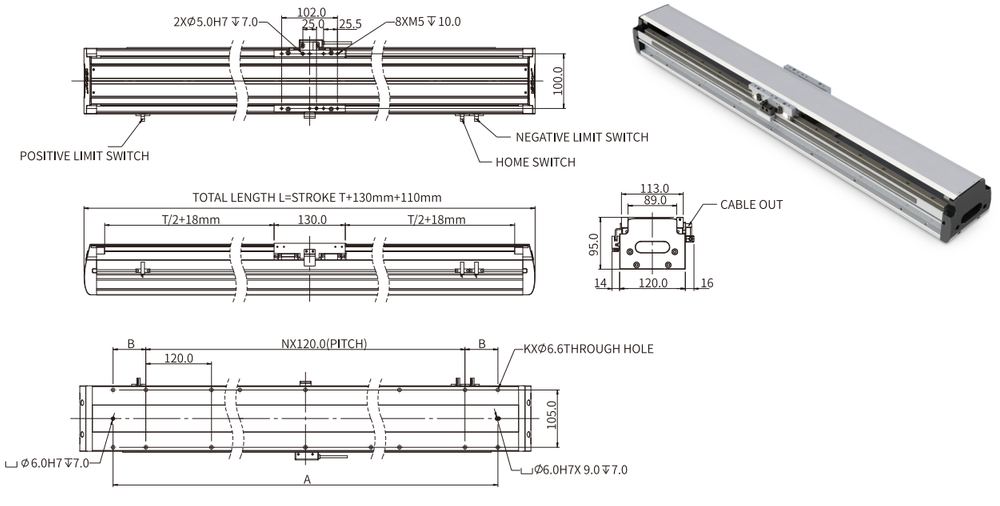
⑨ Special Code

| |
|---|
| 1 |
| Blank for Standard Models |



# XPLS119 Series

## XPLS119-C15-W060 Linear Motor Module




## XPLS119-C15-W060 Module Model and Parameters

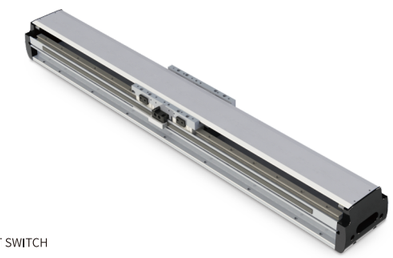
| Parameters | Stroke T (mm) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 |
| K | 6 | 6 | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 | 18 |
| N | 0 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 |
| A(mm) | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 |
| B(mm) | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 | 960 | 1020 |

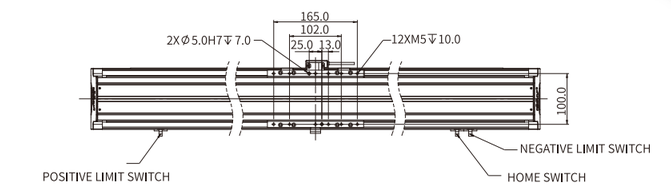
| Parameters | Stroke T (mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
| K | 18 | 22 | 22 | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 |
| N | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 |
| A(mm) | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 |
| B(mm) | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 |

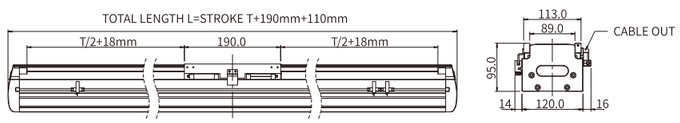
## XPLS119-C15-W060 Module Configuration and Performance Parameters

| Configuration: | |
|---|---|
| Motor | XPIX-C15-W060-C1-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current:2.5A Peak current:10A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length:500mm LAMOTION(recommended) |
| Guide | Type-15 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust:154N Peak thrust:616N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 28 kg; Side-hanging installation: load ⩽ 20 kg |
| Accuracy | Magnetic scale repeatability:±5μm Optical scale repeatability:±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 7.2 kg (+0.9 kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |

## XPLS119-C2-W060 Linear Motor Module

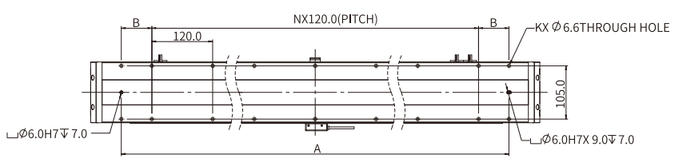











## XPLS119-C2-W060 Module Model and Parameters

| Parameters | Stroke T (mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 |
| K | 6 | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 | 18 |
| N | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 |
| A(mm) | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 |
| B(mm) | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 | 960 | 1020 |

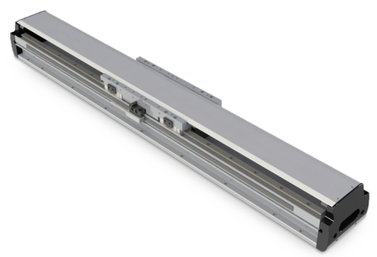
| Parameters | Stroke T (mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 |
| K | 18 | 22 | 22 | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 |
| N | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 |
| A(mm) | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 |
| B(mm) | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 |

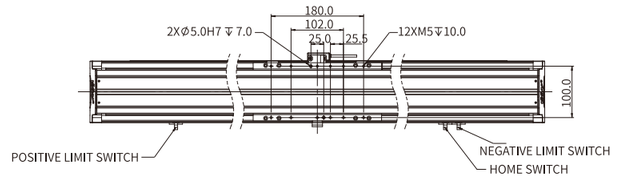
## XPLS119-C2-W060 Module Configuration and Performance Parameters

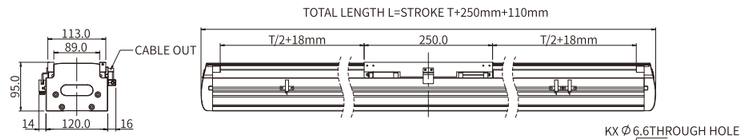
| Configuration: | |
|---|---|
| Motor | XPIX-C15-W060-C1-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current : 5A Peak current : 20A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length: 500mm LAMOTION(recommended) |
| Guide | Type-15 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust: 225.8N Peak thrust: 900N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 35 kg; Side-hanging installation: load ⩽ 25kg |
| Accuracy | Magnetic scale repeatability :±5μm Optical scale repeatability :±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 9kg (+0.9 kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |



## XPLS119-C3-W060 Linear Motor Module

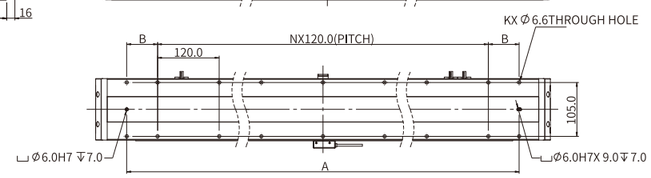











## XPLS119-C3-W060 Module Model and Parameters

| Parameters | Stroke T (mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 |
| K | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 | 18 | 18 |
| N | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 |
| A(mm) | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 | 960 |
| B(mm) | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - |
| L(mm) | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 |

| Parameters | Stroke T (mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | |
| K | 22 | 22 | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 | |
| N | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | |
| A(mm) | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | |
| B(mm) | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | |
| L(mm) | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | |

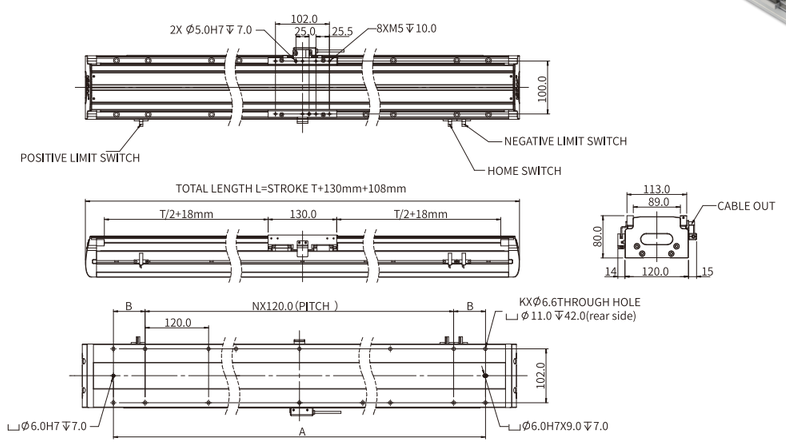
## XPLS119-C3-W060 Module Configuration and Performance Parameters

| Configuration: | |
|---|---|
| Motor | XPIX-C15-W060-C1-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current : 5A Peak current : 20A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length: 500mm LAMOTION(recommended) |
| Guide | Type-15 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust: 337.5N Peak thrust: 1350N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 40 kg; Side-hanging installation: load ⩽ 25kg |
| Accuracy | Magnetic scale repeatability :±5μm Optical scale repeatability :±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 11 kg (+0.9 kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |

# XPLS120 Series

## XPLS120-B15-W060 Linear Motor Module






## XPLS120-B15-W060 Module Model and Parameters

| Parameters | Stroke T (mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 |
| K | 6 | 6 | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 |
| N | 0 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 |
| A(mm) | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 |
| B(mm) | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 |
| L(mm) | 298 | 358 | 418 | 478 | 538 | 598 | 658 | 718 | 778 | 838 | 898 | 958 |

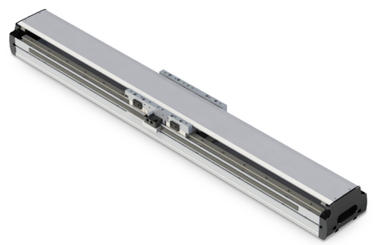
| Parameters | Stroke T (mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 |
| K | 18 | 18 | 22 | 22 | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 |
| N | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 |
| A(mm) | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 |
| B(mm) | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 1018 | 1078 | 1138 | 1198 | 1258 | 1318 | 1378 | 1438 | 1498 | 1558 | 1618 | 1678 | 1738 |

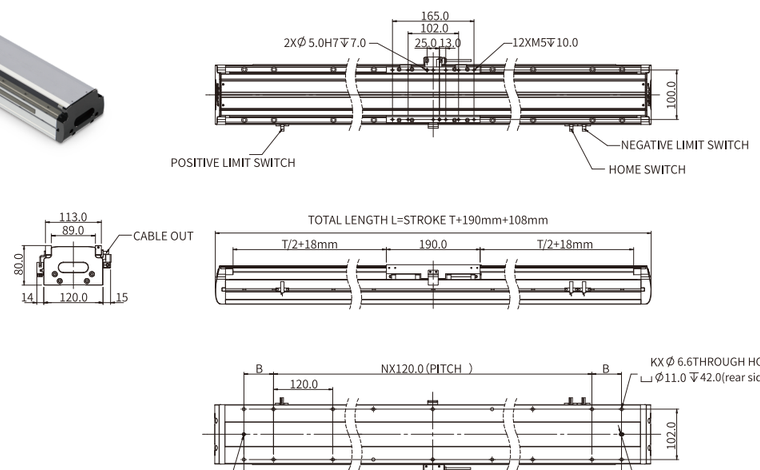
## XPLS120-B15-W060 Module Configuration and Performance Parameters

| Configuration: | |
|---|---|
| Motor | XPIX-C15-W060-C1-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current : 2.5A Peak current : 10A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length : 500mm LAMOTION(recommended) |
| Guide | Type-15 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust : 110.5N Peak thrust: 442 N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 20 kg; Side-hanging installation: load ⩽ 20kg |
| Accuracy | Magnetic scale repeatability :±5μm Optical scale repeatability :±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 6kg (+0.75 kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |



## XPLS120-B2-W060 Linear Motor Module






## XPLS120-B2-W060 Module Model and Parameters

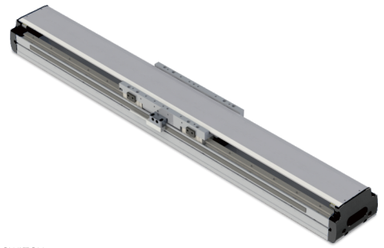
| Parameters | Stroke T (mm) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 |
| K | 6 | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 | 18 |
| N | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 |
| A(mm) | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 |
| B(mm) | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 358 | 418 | 478 | 538 | 598 | 658 | 718 | 778 | 838 | 898 | 958 | 1018 |

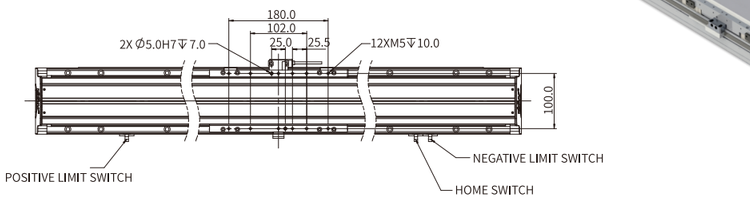
| Parameters | Stroke T (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 |
| K | 18 | 22 | 22 | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 |
| N | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 |
| A(mm) | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 |
| B(mm) | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 1078 | 1138 | 1198 | 1258 | 1318 | 1378 | 1438 | 1498 | 1558 | 1618 | 1678 | 1738 |

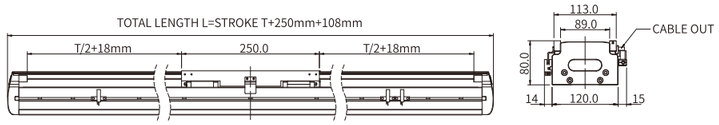
## XPLS120-B2-W060 Module Configuration and Performance Parameters

| Configuration: | |
|---|---|
| Motor | XPIX-C15-W060-C1C2-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current : 5A Peak current : 20A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length : 500mm LAMOTION(recommended) |
| Guide | Type-15 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust : 147N Peak thrust: 588 N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 25kg; Side-hanging installation: load ⩽ 25kg |
| Accuracy | Magnetic scale repeatability :±5μm Optical scale repeatability :±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 7.4 kg (+0.75 kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |

## XPLS120-B3-W060 Linear Motor Module

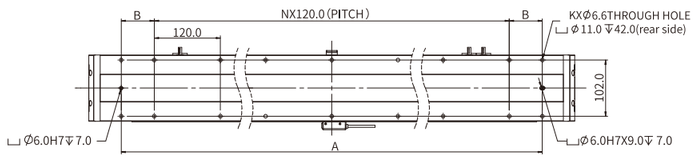











### XPLS120-B3-W060 Module Model and Parameters

| Parameters | Stroke T (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 |
| K | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 | 18 |
| N | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 |
| A(mm) | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 |
| B(mm) | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 418 | 478 | 538 | 598 | 658 | 718 | 778 | 838 | 898 | 958 | 1018 |

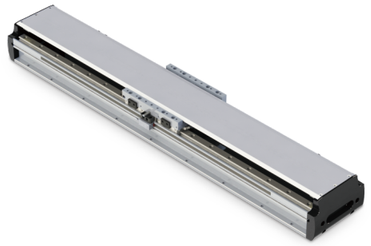
| Parameters | Stroke T (mm) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 |
| K | 18 | 22 | 22 | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 |
| N | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 |
| A(mm) | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 |
| B(mm) | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 1078 | 1138 | 1198 | 1258 | 1318 | 1378 | 1438 | 1498 | 1558 | 1618 | 1678 | 1738 |

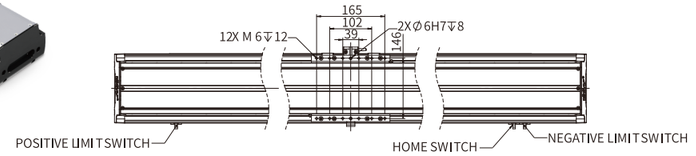
### XPLS120-B3-W060 Module Configuration and Performance Parameters

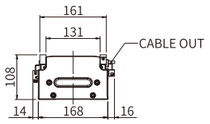
| Configuration: | |
|---|---|
| Motor | XPIX-B3-W060-C1C2-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current : 5A Peak current : 20A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length : 500mm LAMOTION(recommended) |
| Guide | Type-15 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust : 226N Peak thrust : 905N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 35 kg; Side-hanging installation: load ⩽ 25kg |
| Accuracy | Magnetic scale repeatability :±5μm Optical scale repeatability :±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 9kg (+0.75 kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |

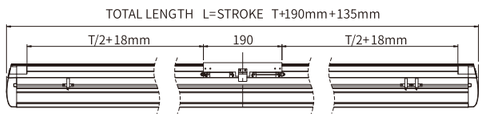


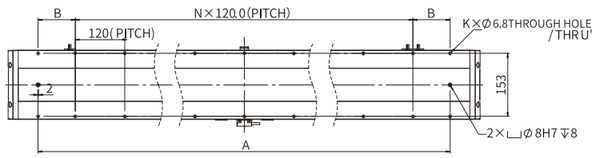
## XPLS168-C2-W090 Linear Motor Module






### XPLS168-C2-W090 Module Model and Parameters

| Parameters | Stroke T (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 |
| K | 6 | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 | 18 | 18 | 22 |
| N | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 |
| A(mm) | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 | 960 | 1020 |
| B(mm) | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 |
| L(mm) | 385 | 445 | 505 | 565 | 625 | 685 | 745 | 805 | 865 | 925 | 985 | 1045 | 1105 | 1165 |

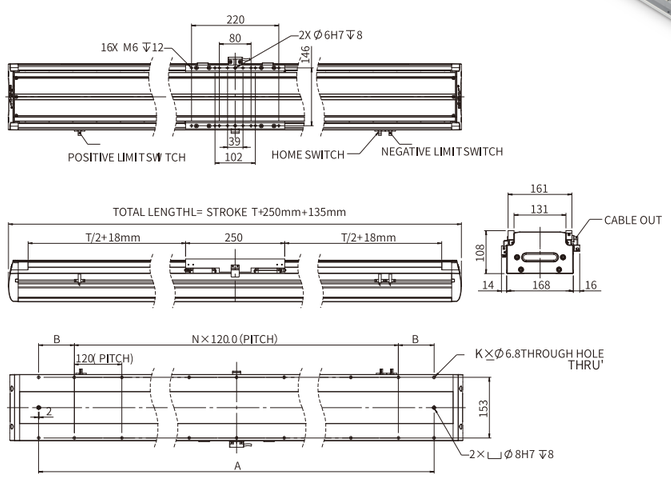
| Parameters | Stroke T (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 |
| K | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 | 30 | 34 | 34 | 34 | 34 |
| N | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 |
| A(mm) | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 |
| B(mm) | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 1225 | 1285 | 1345 | 1405 | 1465 | 1525 | 1585 | 1645 | 1705 | 1765 | 1825 | 1885 | 1945 | 2005 |

### XPLS168-C2-W060 Module Configuration and Performance Parameters

| Configuration: | |
|---|---|
| Motor | XPIX-C2-W090-C1C2-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current : 5A Peak current : 20A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length : 500mm LAMOTION(recommended) |
| Guide | Type-20 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust : 392N Peak thrust : 1568 N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 60kg; Side-hanging installation: load ⩽ 50kg |
| Accuracy | Magnetic scale repeatability :±5μm Optical scale repeatability :±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 14.6 kg (+1.4 kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |

## XPLS168-C3-W090 Linear Motor Module






## XPLS168-C3-W090 Module Model and Parameters

| Parameters | Stroke T (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 |
| K | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 | 18 | 18 | 22 | 22 |
| N | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 8 |
| A(mm) | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 |
| B(mm) | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 |
| L(mm) | 445 | 505 | 565 | 625 | 685 | 745 | 805 | 865 | 925 | 985 | 1045 | 1105 | 1165 | 1225 |

| Parameters | Stroke T (mm) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 |
| K | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 | 30 | 34 | 34 | 34 |
| N | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 |
| A(mm) | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 |
| B(mm) | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 |
| L(mm) | 1285 | 1345 | 1405 | 1465 | 1525 | 1585 | 1645 | 1705 | 1765 | 1825 | 1885 | 1945 | 2005 |

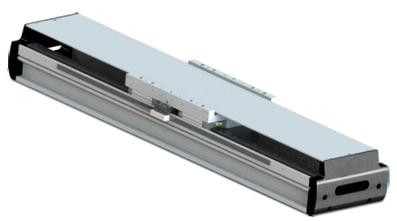
## XPLS168-C3-W090 Module Configuration and Performance Parameters

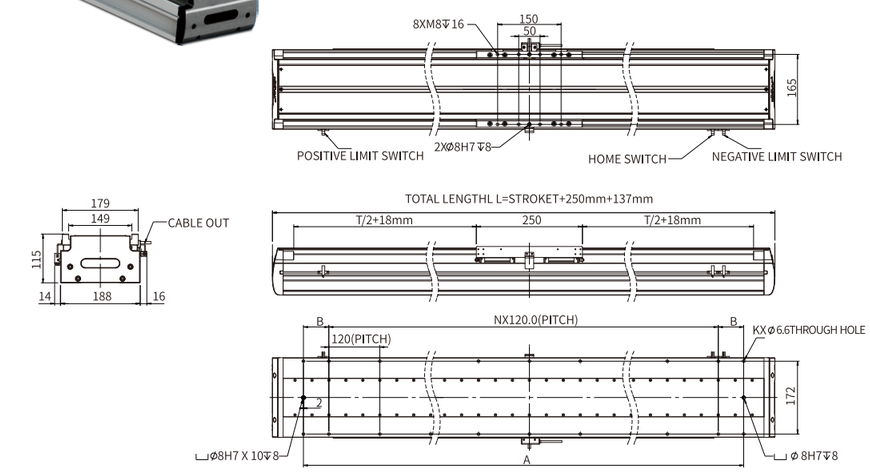
| Configuration: | |
|---|---|
| Motor | XPIX-C3-W090-C1C2-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current : 5A Peak current : 20A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length : 500mm LAMOTION(recommended) |
| Guide | Type-20 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust : 561N Peak thrust: 2244 N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 80 kg; Side-hanging installation: load ⩽ 60kg |
| Accuracy | Magnetic scale repeatability :±5μm Optical scale repeatability :±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 16.7kg (+1. 4kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |



# XPLS188 Series

## XPLS188-C2-W090 Linear Motor Module






## XPLS188-C2-W090 Module Model and Parameters

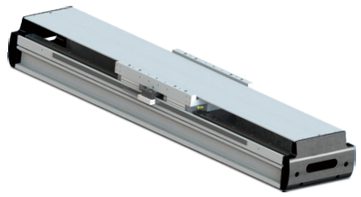
| Parameters | Stroke T (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 |
| K | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 | 18 | 18 | 22 | 22 |
| N | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 8 |
| A(mm) | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 |
| B(mm) | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 |
| L(mm) | 447 | 507 | 567 | 627 | 687 | 747 | 807 | 867 | 927 | 987 | 1047 | 1107 | 1167 | 1227 |

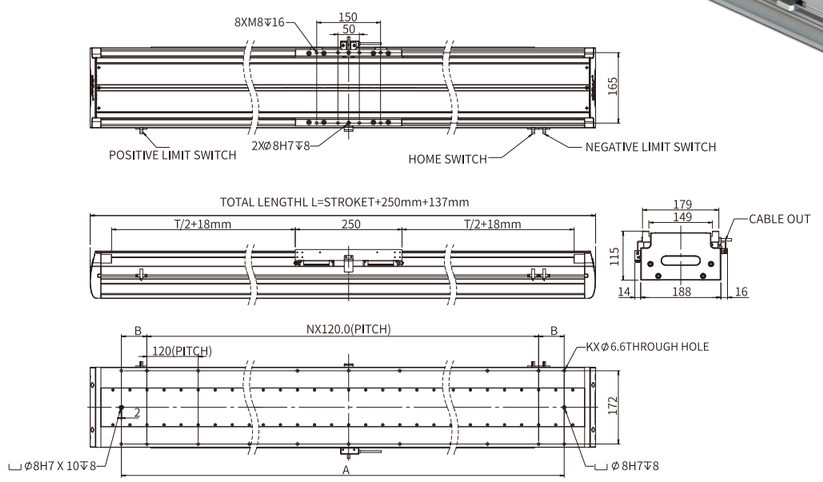
| Parameters | Stroke T (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 |
| K | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 | 30 | 34 | 34 | 34 | 34 |
| N | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 | 16 |
| A(mm) | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 | 1920 |
| B(mm) | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - |
| L(mm) | 1287 | 1347 | 1407 | 1467 | 1527 | 1587 | 1647 | 1707 | 1767 | 1827 | 1887 | 1947 | 2007 | 2067 |

## XPLS188-C2-W060 Module Configuration and Performance Parameters

| Configuration: | |
|---|---|
| Motor | XPIX-C2-W090-C1C2-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current : 5A Peak current : 20A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length : 500mm LAMOTION(recommended) |
| Guide | Type-25 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust : 392N Peak thrust: 1568 N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 70kg; Side-hanging installation: load ⩽ 70kg |
| Accuracy | Magnetic scale repeatability :±5μm Optical scale repeatability :±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 19.8 kg (+1.45 kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |

## XPLS188-C3-W090 Linear Motor Module






## XPLS188-C3-W090 Module Model and Parameters

| Parameters | Stroke T (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 60 | 120 | 180 | 240 | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 |
| K | 10 | 10 | 10 | 10 | 14 | 14 | 14 | 14 | 18 | 18 | 18 | 18 | 22 | 22 |
| N | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 | 8 | 8 |
| A(mm) | 300 | 360 | 420 | 480 | 540 | 600 | 660 | 720 | 780 | 840 | 900 | 960 | 1020 | 1080 |
| B(mm) | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 |
| L(mm) | 447 | 507 | 567 | 627 | 687 | 747 | 807 | 867 | 927 | 987 | 1047 | 1107 | 1167 | 1227 |

| Parameters | Stroke T (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 900 | 960 | 1020 | 1080 | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 |
| K | 22 | 22 | 26 | 26 | 26 | 26 | 30 | 30 | 30 | 30 | 34 | 34 | 34 | 34 |
| N | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 | 16 |
| A(mm) | 1140 | 1200 | 1260 | 1320 | 1380 | 1440 | 1500 | 1560 | 1620 | 1680 | 1740 | 1800 | 1860 | 1920 |
| B(mm) | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - | 30 | 60 | 90 | - |
| L(mm) | 1287 | 1347 | 1407 | 1467 | 1527 | 1587 | 1647 | 1707 | 1767 | 1827 | 1887 | 1947 | 2007 | 2067 |

## XPLS188-C3-W090 Module Configuration and Performance Parameters

| Configuration: | |
|---|---|
| Motor | XPIX-C3-W090-C1C2-TP-0.2 Power cable length:200mm Dynamikwell |
| Drives | Continuous current : 5A Peak current : 20A |
| Feedback | Magnetic scale:DMT010 1μm resolution Cable length:200mm Dynamikwell<br>Optical scale:Ru2 0.5μm resolution Cable length : 500mm LAMOTION(recommended) |
| Guide | Type-25 dual guide rail |
| **Performance Parameter:** | |
| Thrust | Continuous thrust : 561N Peak thrust: 2244 N |
| Load | Under conditions of 1G acceleration, 1000 mm/s speed, 0.2 s dwell time, over a 1000 mm stroke run<br>Horizontal installation: load ⩽ 100 kg; Side-hanging installation: load ⩽ 80kg |
| Accuracy | Magnetic scale repeatability :±5μm Optical scale repeatability :±2μm |
| Straightness | ±10μm/300mm |
| Weight | 60 mm stroke: 21.6kg (+1. 45kg per additional 60 mm of stroke) |
| Installation Methods | Horizontal installation / Side-hanging installation |